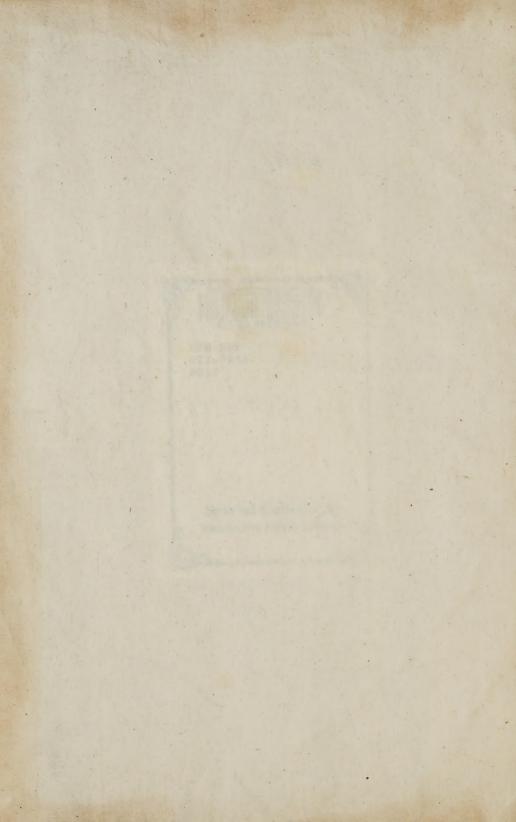
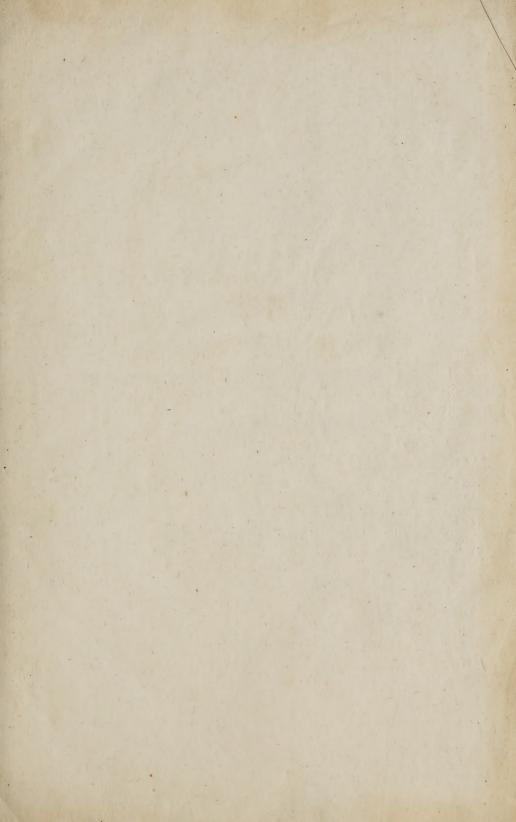


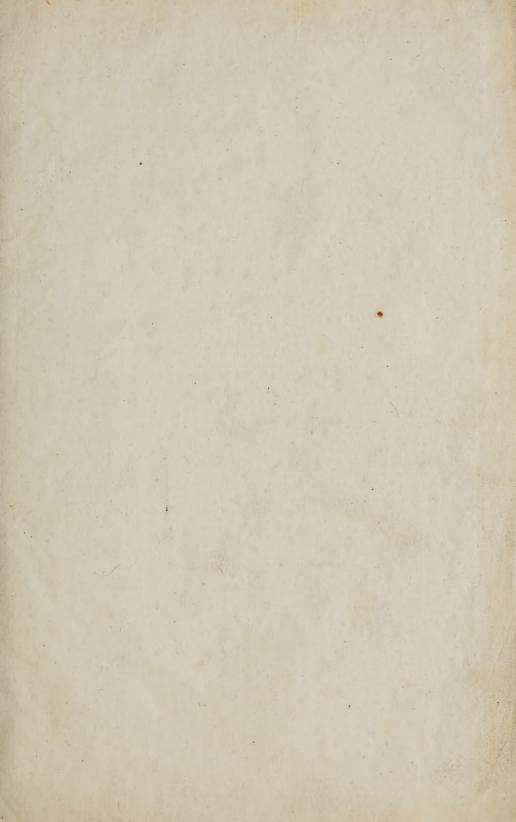
Gran wely be audor



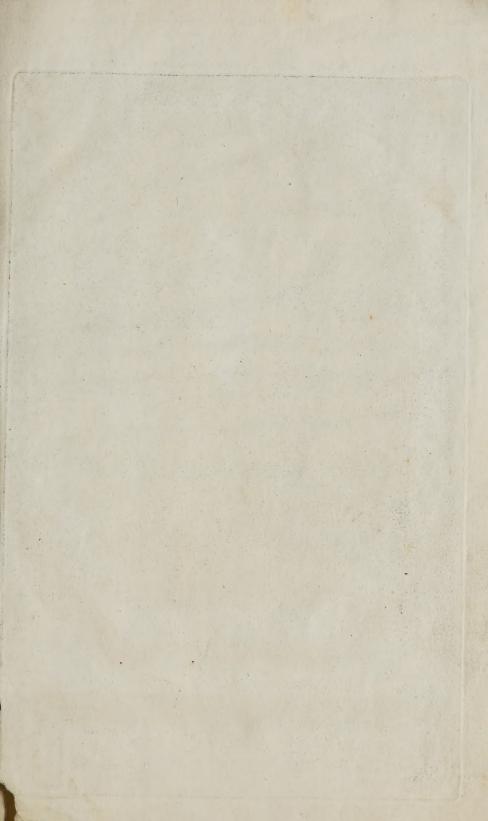




Digitized by the Internet Archive in 2024 with funding from Vancouver Public Library









## Fodinæ Regales.

OR THE

# HISTORY, LAWS

AND

## PLACES

OF THE



Works in England, Wales, and the English Pale in Ireland.

As also of the MINT and MONY.

WITH
A CLAVIS Explaining some difficult Words
relating to Mines, &c.

By Sir JOHN PETTUS, Knight.

LONDON:

Printed by H. L. and R. B. for Thomas Basset at the George in Fleetstreet, near Cliffords Inne.

M. DC. LXX.

1 2 0 Works to the water that the water with the Our return Wellight to Its es Lott we to some the sound of th y=1,5 fc1 s 2 s 4t - 121 () LONG OF THE SERVICE OF A CONTROL OF THE SERVICE OF

#### · To His HIGHNESSE

Prince Ruperi,

Count-Palatine of the Rhine, Duke of Cumberland. Knight of the Most Noble Order of the Garter, Constable of Windfor-Castle, Chief Governor of the Mynes-Royal and Mineral Works in England, &c. And one of His MA-JESTIES most Honourable PRIVY COUNCIL.

SIR,

HIS Treatise of the Mines Hum. bly submits it self to Your Patronage, and the rather, because as I therein observe, at every 70 Years some signal Occurrence revived them to our Memories; for in the fixth of Eliz. after several 70 Years, a German gave us the clearest Guidance to their Conduct; And your HIGHNESSE about 70 Years after made them very useful to his late MA-HESTIES Martial Affairs during the Civil Wars: and now in time of Peace, we have made choice of you for our Chief Governor to both Societies: But in respect you were not privy to the Grants and Priviledges belonging to us, I conceive this short History or rather Abstract of what concerns us, may be acceptable to you; I confess, they are unfit for your Perusal, were not my Intents more zealously employed upon higher Advantages,

## The Epistle Dedicatory. .

as your Highness may collect from my fifth and fixth Chapters; for I think it requipte that the Countreys and Villages, where fuch Mines and Minerals are, should be exactly and publickly known, which I shall in time divulge (with the like for Plants) whereby such Metallists, Mineralists, Botannists, or other Artists, who have occasion to use them, need not trouble forein parts; for with more ease and as much plenty, they may be suppli= ed at home. But not to trouble your Highness further, I was under your Command in the late Wars, where I was in part witness to your great Conduct, and Heroick Acts, and I am now once more under your Command in the Affairs of the Mines, whereby I have also observed your incom. parable skill and general Knowledge in the lef. fer Arts and greater Sciences, worthy of a Princes Recreation and Study, all in their kind tending to some publick good, and to inspect them no diminution of Greatness, and in these wherein your Judgement may tonceive my Capacity extendable, be pleased freely to Command,

SIR,

Anno 1670.

Your most Humble, Obedient, and Obliged Servant,

JO. PETTUS.

To the Right Honourable

## The Lord Ashley,

Chancellor of the Exchequer, one of the Governors of the Mines Royal, and Mineral Works, and of His MAJESTIES PRIVY COUNCIL.

MY LORD,

HIS Treatife presents it self also for yourLordships Concurrence, whering I have clearly stated the Kings Interest in our Mines by his Pre-

rogative, according to the most ancient and best; Record: I have also added the particular Cu-Stomes of some Counties, and other Discourses of things relating to our Societies. And I did once resolve to have inserted, first the reasons why we do not make such benefit of our Mines and Minerals as we might do; and secondly, the remedies which may be used for the better mana. ging of them; But I do forbear to publish them, because I have seen the bad effects of Printing those worthy Designs concerning Fishing, the Guiny Trade, and Farthings, &c. for if they had been only in the breast of the State, till every circumstance and opposition had been well weigh'd, refolved, and (unexpected to others) put in execution; they would have redounded much more to the publick advantage: And this Affair of our native Mines and Metals is much of the like nature,

for

## The Epistle Dedicatory.

for I conceive the King and Kingdoms Interest is first to be considered; Next, how the Proprietors may be so sweetned by profit to them, that they may not only concurre in voluntary Discoveries, but assist in their Operations, (and this may be done without diminution of the Kings Prerogative;) Thirdly, how we may Supplant Foreiner, herein, who hitherto have Supplanted us; Fourthly, how to countenance Discoverers, either by rewards or assistance; Fifthly, to encourage Lessees, and to prevent their fraud, of which hitherto many have been too guilty; And lastly, how by these to make some honest and reasonable prosit to our selves. And that these may be the better digested, it is humbly recommended to your Lordship, That a Committee of the Societies may be chosen (being upon Oath) which may Modell these Heads, or more, into fit Representations to His MA-JESTIE; and according to his Approbation, the Societies to put them in action; and to them I shall be ready to represent my thoughts and Considerations, with a constant recourse to your Lordships Universal Knowledge, which may directus in the most facile way of effecting what is aimed at, by,

Anno 1670.

My Lord,
Your Lordsh ps most Humble
and faithful Servant,

JO. PETTUS.

## HONOURED FRIENDS

OF THE

## SOCIETIES

OF THE

Mines and Mineral Works in this History

Mentioned.

Bout Twelve Years since you were pleased freely to make me a Participant in both your Societies, to gratisse which Favours I have ever since studied and endeavoured your Services, and at some of our

Meetings Considerations being had that it was fitting to make our Societies more publickly known, for the benefit of Lessees and Discoverers of Mines, &c. I resolved to write, and by the Encouragements of my Honoured Friends Sir Robert Murray and Sir Francis Gobb, and Some of the Long Robe, both Common and Civil, and the help of our own Records, I have at last produced this History, wherein I can call nothing my own but the imperfect Method, Style, some few Obfervations, and the pleasure I took in finding such a worthy Diversion from Idlenesse.

B

It

It is the first Collection extant of this kind, and if I have pleased you herein, and facilitated the way to any future Additions by others, I hope to receive their thanks, and yours, which is all that is expected by

Anno 1670.

Your Grateful Friend and Servant,

90. PETTUS.

## INTRODUCTION

#### TO THIS

## HISTORY.

HE Usual Method of Historians is to to be gin with the Creation wherein I might tell you, that when GOD breathed upon the Face of the Waters, that was a Patrefying Breath; and that such Waters as were quiet and calm turned into Plains or Le-

velled Earth, and the Boiste ous Waters into Hills and Mountains, according to the proportion of the Billows, and their Spaces into Vallies, which have ever fince con= tinued in those wonderful and pleasant Dimensions, the Seminal Virtues of all Sublunary things being locked up. and more durably p elerved in them; and yet from thence they are transmitted through Terrene Pores, either from their own Exuberancies, or the Sun or Stars Extra-Etions into various and visible Forms: and these Extram Bons may be the better conjectured, because many do write of Subterranean Trees, Serpents, Fishes, &c. which in their confined Bulks cannot transmit themselves, but by the Effluctions of those Seminaries do force their Appearance upon the Surface of the Earth in more delightful And fuch S perficial Excressencies (whether Vegreables or Minerals) do Girect the Miners in their Knowledge

## The Introduction.

ledge of the Nature of the Metals under them; which sometimes also is done by the Virgula Divina, or Magical Rod (being no other then an Hazel Stick cut in a certain season of the Stars Aspects) still shewing what rare Conguly there is between the Stars, Plants, Animals and Minerals; as if they were but the soft Products of those Meduullian Patrefactions. And it is also observable that in all Operations of Metals, before they be fit for use, they are reduced into Water or a certain Liquidity, shewing that their first matter was Water (as I said, and) as many Philosophers do hold, and we see that onely Fire can reform these Condensations into their first Principles.

And now I speak of Fire, I might also discourse of the strange nature of Bone-ashes, (of which our greater and lesser Tesses are made) so resistible of that Element, that if any one would write of the Nature of Ostiologie, good Arguments might be raised for the Resurrection of our dry Bones with their attending Spirits, without dissurbance to the Power of the General Confligration; my Considerations herein being sounded upon the Opinion of some Rabbins, who held the Resurrection of Mans Bodie shall be by means of a certain incorruptible Bone in him.

After the formal Historian hath vented his Philosophy about the Creation, he usually proceeds to Adam, of whom also I might tell you, that he may be esteemed a Miner from the Text; where tis said, that God placed him in Paradise, and commanded him to dig or till the Earth: As also a Refiner; otherwise, why should it be made known to him, that the River Pison did encompass the Land of Havilah where Gold was, if Adam were not to wash and refine it from the less valuable Earth? And the Knowledge of this was part of Adam. Wisdom, for Gold (if I interpret it right) is relative to Wisdom, when

Gin.2.

'tis said, that God filled all things with his Wisdom, as Pison, (Pison being mentioned in no other places of Eccln.? 4.27 Scripture) as the onely River that encompassed Gold; and nothing shews our Wisdom more, then the compassing or getring of Gold by proper courles, and then the wife use of it, and the Sciences belonging to it: and doubtless the great plentie of Gold with which Solomon had stored himself, made him be esteemed the wifer. And it is not to be omitted, that the three Wise Men of the East in their Wildom thought it a Present fit for a Sa= wiour.

I might also inform such men as think it not lawful to meddle with any thing that is not mentioned in Scripture, that for their comfort Six of the Seven Metals are there often repeated; viz Gold, Silver, Tin, Copper (or Brass,) Iron, and Lead; but Quicksilver is not, yet instead thereof Amber is, of which two there is diversitie of opinions, which should be the few nth Metall, they that deny the frenth place to Quicksilver, fay it is but Silver liquid, and included in Silver, and so Amber may come in as the feventh, and the rather because Scripture mentions it. Now Pliny and the Civil Laws make three forts of Amber, which the Latine calls Electrum, one the gumme or natural juice of a tree, the other found in Es thiopia in large Pieces, not known to proceed from Trees; the third is a natural Composition of Gold, and a fifth Part of Silver, according to Pliny, which upon diffolution it is found to contain; and this is the true Eu Etrum, or Metallick Amber, or seventh Metal, and the Scriptures Exek 8.2 have such esteem of it, that where the Text speaks of a Vision (the vulgar and Chaldee Translators say the vision was quasi Aspestum Electri, like the Aspect of Amber; but the Syriack faith, the Vision was quasi Aspectum Dei, like the Aspect of God; so great esteem had this Electrum in the world, that they could not parallel the description of it to any thing, but the Aspett of God bimself, which modefly

## The Introduction,

de sily is to be understood, that no Celestial or Terresirial thirgs have equal resplendency to it: And therefore if Adam had any notice of it, it might then have been properly placed the soft of Metals; but since it is not, let it satisfie them to stand in the seventh place, because it is in the Scripture, and not Ourcksilver, and was known to sormer Ages, though not to us, unless what is imitated by Art: And as I have given you a hint of some observations upon two or three Metals, I might run through the rest, but that were to make a Book of a Preface.

I might also adde, that it is thought by Paracelsus, that Moses in writing the History of the Cre tion did mystically teach the whole progress of the Metallick Art, and that Mayerus teacheth this Art also by the use of M. s.c.k: But these and many other speculations I wave, for my instentions are rather to instruct others in the practical Part, then amuse them with the Theory; therefore that they may be the better guided, give me leave to recomm not the 33. and 34. Books of Pliny's Natural History of Metals, and next Georgius Agricola, for the ways of sinding out Metals, digging and ordering them together, with the description of the Engines and Tools requisite for that work.

Then Lazarus Escherus, which by order of the Societies is translated out of High Dutch, and this teaches the perfect way of Melting, Fining, and resining Metals, the manner of making Furnaces, Tests, and Instruments sit for such operations; and if thou desirest to dive into the secrets of the Philosophers stone, let me recommend to you the second part of Joannes Spagnetus, who layes the most plausible Maximes for it, of any that I meet with, and for the practicall part of this, I refer thee to B. silius Valentinus: And for the clearer understanding of these Authors, I shall shortly present you with

## The Introduction:

a Distio nary of such words as concern the Metallick and Chemick Arts with their Interpretations; a Specimen whereof is at the end of the Book. And now, Kind Reader, as thou likest this thou mayest proceed.

FODINE





## A DISCOURSE

OF

THE HISTORY AND LAWS

Of the

MINES and MINERALS

Within England, Wales, and the English Pale of Ireland.

#### CHAP. I.

What a Mine is:



MINE is defined to be a certain For Mine.

ramen, Hole, Hollow place, or Passage digged in the Earth, from whence Metals or Minerals are by labour raised: for if common Stones onely are found (as Marble, Touchstone, Free-stone, &c.) we call them Quarries, and Quarries.

not Mines. And where Clays are digged (as Fullers earth, Potters earth, &c.) we call them Pits. Libavius terms it Pits. the Womb, or Natures place of Metals.

#### CHAP. II.

The Names of those holes which concern Metals.

Shaft or Puteus.

Hey are either called Shafts or Adits. The Shaft is that which is digged round or square, like a Well, from which the Earth that is digged is wound up in Bafkets by Ropes, as we do Buckets of water; and these are not onely for that use, but likewise to give air to the Mine. And ofttimes Pumps are put into these Shafts, to fetch out the water; for these Shafts are in many places 40, 50, or 6e fathom deep before the Miners come to the Metalor M nerals for which they dig.

Adit or Cuniculus.

Now the Adie is from the Latine word Aditus, that is to fay, an entry, passage, or approach to a thing. And this is usually made on the side of the Hill, but towards the bottom, about 4, 5, or 6 feet high, and 8 feet wide, in the nature of an Arch, fometimes cut in the rock, and sometimes supported with timber; fo that the sole or bottom of this Adit may answer the bottom of the Shift, but somewhat lower, so as the water may have a sufficient Current to pass away, which is exactly known by the ordinary ways of Dialing, or the Workmans keeping the water at his foot while there is any : and he is directed toward the Shaft by a Needle touch'd with a Loadstone, the using whereof is called Dialling: and by this and other Arts the water is conveyed away with more ease and less charge then by Pumps. And when the Miners by these Shafts or Adits do strike or threed a Vein of any Metal (for Metils under the Earth are dispersed like Veins in our bodies, and therefore called Veins) then the Metal which is digged from those Veins is called Our, as Silver oar, Lead oar, &c. And by these Adits the Fumes, Damps. and unwholesome Vapours, are better dispersed, which otherwise might endanger the Miners; but if any of

them

Dialling.

Ozr.

Damps.

them be surprised with such a Damp, so as for the present he may be deprived of his senses, he is drawen up out of the Mine, and they dig a little hole in the earth, and Against lay him on his belly, with his mouth to the fresh Earth Damps. of that hole, which speedily recovereth him.

#### CHAP. III.

## The several Metals for which we dig.

Hey are Gold, Silver, Tin, Copper Lead, Iron and Quick- Metals: filver; and these are often found lying upon the cliffs or chincks of Rocks, known by their colour, brightnels, or other marks; or by fuch other Minerals as the Workmen call Leaders, because they usually accompany the Metallick oar, and lead to it. Or they are discovered to us either by the nature of Plants which grow over The ways of discovering them, by the Flough, by Moles which cast up their shade or them. glittering earth; (and therefore in Derby-shire and other places where Lead abounds, they rarely kill them) or by Springs and Streams of water, or by the use of an Hazel flick (if credit may be given to it :) But by some or one of these the Miners are encouraged and directed to dig. As for Gold and Silver, which are the nobler and richer Metals, we have not yet discovered any Mines which yield perfect Gold or Silver oar (as in America and other hotter Climats, although we are not altogether out of hopes of very rich ones in England and Wales) but our former and later Ages here have and yet do get Gold and Silver meerly by Extraction, or melting those baser hard Metals, so as by art of the Refiner the Gold or Silver is separated from them.

Now the Oars which this Kingdom affords are onely Tin, Copper oar, Leadoar, Iron oar and Cadmine oar (which some call Callamine) of which Brass is made with a mixture of Copper. And these Oars being digged,

ne

the Miners bring them (being first beaten small and washed) to certain Furnaces and Mills prepared for that

purpole.

Where, when they are smelted and cast into a solid form, if Lead, they call them Pigs; if Tin, Blocks; if Iron, Bars; if Silver or Gold, Cakes; if Copper, Rose-cakes. And being thus formed, the Tin oar is called Tin, the Copper oar, Copper; the Lead oar, Lead; the Iron oar, Iron; the Cadmine and Copper oar united is called Brass: and this being once more melted (which melting is called Resining) if they yield Gold or Silver in any advantageous quantity, the Mine and Oar are entituled accordingly.

#### CHAP. IV.

## Of those Metals as they are mix'd.

S it is questionable whether there be any Element pure, to it may be doubted, whether there be any Metal without a mixture of other Metals. For in hot Countries, where Gold and Silver are so pregnant, that both for bulk and value they give the denomination of a Gold or Silver Mine; yet even from these Lead or Copper, &c. may be extracted in some small proportion: so with us, though the bulk be Tin, Copper, Lead, Iron, Cadmine, &c. yet even from the worst of them some Gold and Silver may also be extracted; and mostly so much, as that the value of that little which is extracted, may be much greater then that of the bulk from whence it had its extraction.

And with the several mixtures of these several Metals other Forms are produced; as Tin and Lead make Pewter, Tin and Brass make Alchymy, Copper and Cadmine make Brass. And sometimes Steel is sound perfect through natural hardness, but Iron and Tin make it by art. Tin, Lead, Brass and Copper make that tunable metal

from

from which our Bells are founded, and the artificial mixture of these six Metals may afford as many varieties as those do Chang es

#### CHAF. V.

Of Minerals and other Products or Juices, bow beneficial to the Kingdom.

He chief are Sulphur, common Salt, Saltpeter, Nitre, Minerals.

Allom, Vitricl, Copperice, Copperice stone, Armoniack,

Arsnick, Sanderick, Cinoper, Vermillion, Stibium, Antimony,

Zink, Black Lead, and many more; Red and Yellow Oker,

and Coals of several sorts.

And from the Metals are produced Letharges, according to the Metals; White Lead, Red Lead, Potters Lead,

and many other varieties.

And in these Veins of Metals and Minerals are often found Loadstones, Amathists, Astrolites, Rough pearl and Soft diamond; and several other excellent things, which are ac-

counted as Treasures.

Besides the enjoyment of the Metals and Minerals digged from the Earth, the benefit to the Nation is great; for in the Book of Rates we shall find above two hundred particulars of ingrowen Metals and Minerals, which do afford great Customs to the Crown, and would do much more, if the management from their original event were duly inspected.

Then for the Physicians and Chymists (though Galenists are not to be slighted) we see of Gold is made Lordials, of Silver Epilepticks; and Tin is used for Cephalaicks, Flisterick

passions, &c.

F. om Copper is extracted Ens Veneris, so famous against Micers, &c. Lead sanative by Emplastrums, Callanine and Brass as eminent for the Eyes, Fron and Steel for the Spleen and Hypocondricks.

As for Quick filver, Sulpbur and Salt, they are the Arcana Chemica, and so are Vitriol and Antimony producing Medi-

cines scarce credible to any but Experience.

The others do service to the Diers and the Painters, and some of them to the Final fex, as Ceruse, Vermilion, &c. giving them Tinctures or Washes of Beauty. And from the piecious Stones they have other imbellishments.

In short: From these Metals and Minerals digged out of the Subterranean world, may be studied the greatest part of NATURE, all Arts imployed, Labours encouraged,

and the chiefest Sciences demonstrated.

#### CHAP. VI.

The Counties and Shires in England and Wales where thefe are found.

Hefe Metals and Minerals are mostly produced from the Hilly and Mountainous parts of England and For Norfolk, S. ffolk, Cambridgefhire, Effex, Ifle of Ely, and other flat and almost level Countries or places, do not afford them, nor are apt to breed them; or if they did, yet it would not quit cost to dig for them, because the charge of exhausting the water by pumps (which must inevitably be) would prove greater then any expectable gains: whereas in mountains and billy places the Waters and Oars may be carried off by Adirs; which though made with hard labour, yet with less charge and more certaintie.

The best Tin Mines yet known are in Cornwall and

Pembrokeshire.

Tin, Coppers Gold and

Silvere

Copper Mines containing some Gold and Silver are in Cornwall, Devonshire, Somersetshire, Glouceste shire, Derbyshire, Shropshire, Cheshire, Northumberland, Cumberland, Pembiokeshire; and we doubt not of good in Kent.

The

The best Lead oar containing Silver are in Devonshire, Lead and Silver. Gloucester (hire, Worcester (hire, Stafford (hire, Leicester (hire, Cheshire, Derby shire, Lancastire, Cumberland, Northumberland, York Shire, Bishoprick of Durham, Flint (bire, Denby (bire, Shropshire, Carnarvanshire, Merioneth, Montgomery, Carra marthen, Brecknick, Monmouth, Buckinghamshire, Dorset= Thire, and (in the time of Harry the Fourth) one in Eßex,

Iron oar is plentiful in Cornwall, Shropshire, Stafford-Iron.

(hire, Gloncester shire and Suffex, &c.

Cadmian oar, or Lapis Calaminaris, in Glouce stersbire, So- Cadmian.

marsetsbire, Cornwall and Nottinghamshire.

Quicksilver is found in many Veins where the Lead Quicksitlies, and in these places are also found the Minerals before-vermentioned.

Allom more particularly is found in Yorksbire and Pem= Allom.

brokelbire.

Note that Allom digg'd is accounted a Metal, but

Allom made of water not fo. Copperice is in the Copper Mines.

Copperice stones are thrown up by the Sea between Copperice

Ouinborough and Gillingham in Kent, &c.

Sanderick, Cinoper, Stibium, Antimony and Black Lead Sanderick, are in most of those places where Lead is discovered, but Stibium, the best Black Lead particularly in Cumberland.

Red Oker in Warwicksbire, Sussex and Somersetsbire.

Yellow Oker in Oxford (hire, &c.

White Lead and Red Lead are made of common Lead, and White Lead. Potters Lead is made by art from common Lead oar.

Salts in Cheshire and Worcestershire in Stones and Lead. Springs, and some is made by art from Salt water on the Salt. Seascoasts, and at Exmouth in Devonshire, and in other marbly Shores, at a low water it shews it self upon the Sand for many miles by calefaction of the Sun.

The Parishes and Villages where the Mines lie not, are under the Societies care, and here omitted, being entered

upon continued Discoveries in their Leiger books.

Antimony, Black Lead. Red Oker. Tellow Oker.

Copperice.

Red Lead.

## OF THE IRISH MINES.

As for those Mines within the English Pale of Ireland, granted to the Society by Queen Elizabeth; it is fit that the Circuit of that Fale should be known, before the par-

ticular places of these Mines be set down.

The Irish do acknowledge that the English Pale is all the Countie of Dublin, Kildare, Carlough alias Caterlough, in the Province of Lemister, and all the Province of Meth, as it is divided into three parts, viz. East Meth, West Meth, and Long ford; and this Circuit is called the English Pale, because those Territories were always inhabited by the English, nor could they be dispossessed notwithstanding the often incursions of the Irish, so that their safe guarding of that Circuit of ground from the Irish was (as it were) a Pale to the English, and therefore called the English Pale.

But when the Society shall think it useful to make a further inquirie into the Latitude of their Grant from the Crown, they will find all Lemister, Ulster, and part of Munster to be also included; but in so much ground as is confessed by the Irish to be within the Pale, and anciently appertaining to the English, there are store of Le d Mines affording good quantitie of Silver; also Copper Mines and Iron Mines, and other Metals and Minerals, which may prove a reward to Industrie, and to the further Inquiries of the Society.

#### CHAP. VII.

The usual Definition of the Poor Mines and Rich Mines or Mines Royal.

Here the Oar which is digged from any Mine doth Poor Mines not yield, according to the Rules of Art, so much Gold or Silver, as that the value thereof doth exceed the charge of Refining, and loss of the baser Metal wherein it is contained, or from whence it is extracted, then it is

called poor Oar or a poor Mine.

On the contrary; where the Oar digged from any Mine MineRoyald doth yield according to the Rules of Art so much Gold or Silver, as that the value thereof exceed the charges of Refining, and loss of the baser Metal in which it is contained; and from whence it is extracted, then it is called rich Oar or a Mine Royal; 'tis appertaining to the King by his Prerogative. And herein consists the skill and honestie of the Refiner; for some have made very great Products from that very Oar, from which less skilful Essayers could extract nothing.

#### CHAP. VIII.

The way of Computing this by the Art of Extraction.

I	<b>5</b> .	<b>3.</b>
Wo Tun and a quarter of Oar makea Iun of Metal at a medi-207		
makea Tun of Metal at a medi-Zo7	17	06
um rate 3 l. 10 s. which is		
Carriage to the Mills at 6 s. 8 d. per Tun-00	15	00
Sives, Tubs and Oar bags at 2 s. is oo	04	00
So that the Charge of the Oar deducted at 708 the Mills which makes a Tun Metal costs 508	17	02
the Mills which makes a Tun Metal costs	1/	
F	Charge	

Charge of Smelting per Tun.			
0 01	1.	g.	ð.
2 doz. White Coal at 8 s. per doz.	00	16	00
5 barrels Black Coal at 2 s. per bar.	00	Io	00
Smelting wages per Tun	00	15	04
Stamping and washing Slags per Tun	00	05	CO
Smiths work per Tun	00	02	04
Rents and Repairs of the Mills, Carpens	)		
ters work, Carriages to the Waters	o r	15	00
fide, Clerks attendance at the Mills, and incident Charges per Tun	Dening Street	-	ment a senior
and incident Charges per I un			
Charge of Refining per Tun	* 7	00	10
Charge of Actioning per 1 th	12	00	1 C
200, of Lead wasted in Refining and Re-2		,	
ducing at 12 s. per Cent.	100	16	00
Refiners wages per Tun	00.	05	00
Black coal, Charcoal, Turf, Bone-ashes,			
Carpenter and Smiths work, and other	or	10	00
- incident Charges -	)		
	03	II	00
Total Charges	16	1 %	10
Catalla male si			
If the said Tun of Metal be made eis			
ther of Goginian, Coomervin or the Darrein oar, the same yields in Silver	14	00	00
per Tun of Metal			
One Tun of Lead the Waste heing?			
One Tun of Lead, the Waste being? deducted, as aforesaid, is	12	00	00
acadetta, as treatment, to	26	00	00
The Charge in all is to a bar	16	11	10
	Mar arrangement of the last of		
Deducted out of 26 l. the clear	200	08	02
profit of a Tun of Lead 13	3	00	0 11
If the said Tun of Metal be made of the	2		
Oar of Coomsumblock, it yields 201.			
per Tun in Silver.			mi ·
•			This

This is only to shew the manner of computing a Mine Royal by Art; but some are of opinion, that all Mitals do contain Gold or Silver in them, and that therefore all Veins of Metals do belong to the King.

But for the Readers satisfaction as to matter of Law in that point, he is referred to the Second Part of this

Treatise.

And thus having briefly described Mines, Metals, Minerals, their places and definitions; the next is to shew what Governours or Office; s the Kings of England have from time to time deputed, and what Directions and Powers have been granted for their better Regulation.

#### CHAP. IX.

## Of the Antiquitie of the Mines Royal.

Hese Works in Wales, with some other in Devonshire, Somersetshire and Cornwall, as far as Tradition can assure us, were anciently wrought by the Romans. By the Damonii in Devonshire and Cornwall, by the Belgæ in Somersetshire, and by the Dimetæ in Cardiganshire. And Cæsar in his Commentaries saith, that one reason of his invading the Britans, was because they assisted the Gauls with their Treasures, with which their Countrie did abound.

And Cimboline Prince of the Trinobantes (wherein Essex is included) who had lived much at Rome in Augustus his time, was seated at Walden in that Countie, and did (according to the Roman way) coin Monie instead of Rings, which might be from that Mine, which was afterward discovered in Hen. IV. his time in that Countie, (as yet unknown to the Societie.) However 'tis certain there were Mines, which did supply former Ages, and may be again used with very great advantage to this present Age.

As for the Laws made by the Romans concerning Mines, the most material of them are abridged, and annexed in their genuine Language, that others may make

their own Interpretations.

Most of which Laws are agreeable to the Grants and Powers of our succeeding Kings; onely as to the Condemning such Men and Women to the Mines, who had committed some heinous Crime against the Laws of the Empire, our Kings have been more merciful therein, though that point were in this Age worthy of consideration, in respect of the yearly multitudes of able ingenious persons, that suffer death by the Laws, whose Lives upon this Imployment might be very useful.

#### CHAP. X.

Of the Powers granted by our Kings concerning the Mines.

#### EDWARD I. Anno 33.

Cornwall.

He King for advancement of the Stannaries in Cornwall frees the Tinners from all pleas of the Natives touching the Court, and from answering before any Juffices, &c. concerning the Stannaries, save onely the Keeper of the Stannaries, (Pleas of Land, Life and Member excepted) neither are they to be kept from work but by the said Keeper, and indemnifies them from Tolls, &c. gives them libertie to dig Tin and Turf any where in the said Countie, and to turn Water-courses for their Works at pleasure: with many other Privileges both to the Keeper and Tinners concerning weighing and selling their Tin.

Tinners.

### CHAP. XI.

# EDWARD III.

Ing Eward III. by Indenture dated 11 July, Anno 32. Rot. 4. grants unto John Ballanter and Walter Bolbolter all his Mines of Gold, Silver and Copper in the Countie of Devon for two years, with libertie to dig and fearch, (except in Gardens yielding 20 marks the first year, and the 5th. part the second year) and all other persons are excluded from digging there.

# EDWARD III.

Among the Remembrances of the Exchequer, the King Salop, to John Jugg and Henry of Wishich; Whereas We are informed, that certain Mines of Lead mixt with Gold and Lead Oar are found in the Countie of Salop, He wills that the Barons of the Exchequer and Treasurer may be certified Gold and of the manner of finding the said Mines, and whether any mixt. hath been transported, and by whom; and impowers them to inquire upon oath, and commands them to certifie His Treasurer and Barons thereof at, &c. so that further Order may be taken, and to return the Inquisition, &c.

Witness Our Treasurer, 30 Octob. Anno 7.

# CHAP. XII.

# RICHARD II.

Divor. Gold and Silver. Ing Richard II. by his Letters Patents dated 11 Junit, Anno 8. grants to Richard Wake Clerk, his Mines of Gold and Silver in the Countie of Devon, and libertie to dig (paying damage to the Owners of the Grounds) as well within Liberties as without, for ten years, paying a tenth part of the profit unto the Holy Church, and to the Exchequer the nineth part, and all other persons to be excluded, prout ante.

# RICHARD II.

Salop,

The King to Hugh of Burnell, and our Sheriff of Salop; Whereas We are informed by James Miner of a Mine of Copper and Silver in or near the Lordship or Priory of Wenlock, whereout no little profit would accrue to Us, if wrought by experienced Workmen; We assign you to ordain the said James to work the same without any let, he not doing any thing against the Laws of our Kingdom, or demolishing any Houses or Gardens, &c.

Witness the King at Westminster, 4 Janii, Anno 17.

Regni, Rot. 12.

### CHAP. XIII.

### HENRY IV.

Ing Henry IV. by his Letter of Mandamus, dat. 11. Essex. Mair, Anno 2. Rot. 34. commands Walter Fitz-Walter (upon Information of a Concealed Mine of Gold) to apprehend all such persons as he in his judgment thinks sit, that do conceal the said Mine, and to bring them before the King and his Council, there to receive what shall be thought sit to be ordered.

# HENRY IV.

The King to William Charleton, Prior of Pilton; Where-Devon. as we have granted to Henry and John Darby the Lead Silver. Mines holding Silver, in Com. Devon. for ten years, paying Us nine pounds of pure Silver yearly, and to Us and others all other dues, We make you Comptroller thereof, and command your diligence therein during pleasure.

Dat. 9 Feb. Anno 7. Regni, Rot. 20.

# CHAP. XIV.

# HENRY VI.

The King by His Letters Patents, dat. 24 Feb. Anno 5. England. grants to John Duke of Bedford, Regent of France, and Gold and Protector of England, all Mines of Gold and Silver within His Kingdom of England, for 10 years, paying the tenth part to the Holy Church, to the King the 15th. and to the Lord of the Soil the twentieth part, to dig, &c. but not under Houses, in Arable Land or Medow, without Licence of the Lord of the Soil, and to make reasonable amends for any damage.

HENRY

### HENRY VI.

The King by his Letters Patents granted to John SolCornwall. lers all Mines of Gold and Silver in Devon and Commall,
Gold, Silver and all Mines of Lead holding Silver or Gold; to hold
and Lead. (from the expiration of 12 years formerly granted to the
Duke of Bedford) for 20 years, paying the fifteenth part
of pure Gold and pure Silver; with libertie to dig and
work the same, but not to dig under any Houses or Cafiles, and a Clause to provide for Wood and Labourers.
Dat. 11 Julii, Anno 17. Hen. VI. Rot. 45.

# HENRY VI

Devon and The King by his Letters Patents makes his Chaplain Dornwall.

Gold, Silver, Copper, Latten, and Copper Latten Lead, within these Latten, and two Counties.

Lead.

Dat. 10 Sept. Anno 30. Hen. VI. Rot. 15. & 20.

# HENRY VI.

The King by His Letters Patents granted to the said Devon and Bottmright Provost and Governour of all his Mines, prout Corper, Tyn ante; and grants him all Mines of Copper, Tin and Lead, there whereout any Gold or Silver shall be fined; to hold during his good behaviour, paying the tenth part of pure Gold and Silver, Copper, Tin and Lead, to be fined at his own charge; with power to let and set for twelve years, paying to the King the tenth Boule of Oar, of Copper, Tin and Lead holding Gold or Silver; and to dig without interruption, with a Clause to make a Provision for Wood and Labourers, the Fee of the Church excepted.

Dat. 20 Junii, Anno 3 1. Hen. VI. Rot. 20. 6. 25.

# HENRY VI.

The King-by His Letters Patents An:0 34. Rot. 24. Devon and gives and grants to the Duke of York all his Mines of Gold Cornewal. and Silver, and of all other Metals containing Gold or Silver, and Silver, within the Counties of Devon and Cornwall; to all Metals hold at the pleasure of the King for 21 years, with a Gold or Containing Clause not to dig under the Houses or Medows of any Silver. person, and with a Clause to free and indemnisse the Miners, without impediment of the King or his Subjects, wheresoever the said Mines shall be found within the said Counties.

# HENRY VI.

Among the Remembrances of the Exchequer, Anno 36. Devon.
Regni, in the Records of Easter Term Rot. 20. inter alia:
Devon. Memorand. That John Bottwright, Governour of the Mines of Berryferres in Devon, complains to this Court, Mins. that Robert Glover at the command of Rozer Champernown took away 144 Bouls of Glance oar, valued at 15 l. 6 s. 8 d. and made profit of the same without any thing allowed to the King, to the Kings damage 100 l, and thereupon desireth the Advice of the Court.

### CHAP. XV.

# EDWARD IV.

**L**ugland: Lead holding Goldor Silver. The King by his Letters Pattents, dat. Dec. 20. Anno 8. Regni to Richard Earl of Warwick, John Earl of Northumberland, and others, grants all Mines of Gold and Silver, &c. on the North side of Trent within England. And all Mines of Lead holding Gold or Silver in the parts aforesaid (agreeing with the Owners of the soyle) to hold from the Feast of the Purification next, for 40 years, paying to the King the 12. part of pure gold and silver, and to the Lord of the soyle a sixteenth part as they grow, liberty to dig, &c. except under Houses or Castles without Licence.

### EDWARD IV.

Semerfet & Glou ceft. Lead, Tin and Copper holding Silver.

The King by his Letters Pattents 30 Julii Anno 12. Rot. 2. grants to Gallias Lynne, Walliam Marriner, and Simon Pert, power to dig and search for Mines, within the Counties of Somerset and Gloucestershire, of Lead-Oar, Tin, or Copper, holding silver or gold for the term of five years, and to agree with the Lord of the soyl, paying to the King every eighth Bowle of rich Oar, with a clause to make their Mills to Fine and Melt, as the Owner and they can agree; And all Officers, &c. to be affishant.

### EDWARD IV.

Northumberland.

Copper.

The King by his Letters Pattents dat. 23, Martii Anno 15. Rot. 20. grants to his brother Richard Duke of Gloucester, Henry Earle of Northumberland, and others, the Mines of Blanch Lands called Shildane in Com. Northumb. And the Mine of Alston Moor called Fetchers. The Mine of Keswick Keswick in Cumberland, and the Copper Myne neer Richmond in Yorkshire; To hold from Lady day next, for 15 years, Paying the King the eighth part neat, to the Lord of the Soil the ninth, and to the Curat of the place a tenth, as they arise.

# EDWARD IV.

The King by his Letters Pattents Dat' 11 Martii, Anno 18
Rot. 31. Upon surrenders of the former grants to William berland.
Goderswick and Doderick Vaverswick, all Mines of Gold, Silver, Copper and Lead in Northumberland and Westmer= Lead.

Silver, Copper and Lead in Northumberland and Westmer= Lead.

land, To hold from Lady day next, for ten years, paying to the King a fifteenth part neat, to the Lord of the Sil, and to the Curat as they can agree.

# CHAP. XVI.

# HENRY the VII.

He King by His Letters Patents, dat. 27 Feb. Anno England & I. Regni, Rot. 92 makes Jasper Duke of Bedford, Wales. and others Earls, Lords and Knights, Commissioners and Goz Gold, Silver, Tin. Lead and Tyn. Lead Copper in England and Wales, to answer the profits to the and Copper, King, and made Sir. William Taylor Comptroller, To hold from Candlemass day following, for 20 years, with Liberties of Court and other Priviledges, Paying to the King the sisteenth part of pure Gold and Silver, and to the Lord of the Soil the eleventh part, as it grows, Liberty to dig and search, &c. Except under the Houses and Castles of the King and his Subjects.

This Henry VII. (a wife Prince) taking notice of his interest and Prerogative in the Mines, did in the very first year of his Reign grant this Commission, and by this and

2 other

other ways raised a vast sum of Mony, and left his rich Coffers to Henry VIII. Who added to the Bulk by the Sale of Ablies, &cc. But before Honry VIII. his death, almost all the Treasures of his Fathers and his own were consumed, and what remained was left to Edward the VI. an Infant, whose experience could not guide him to the Care of such affairs: then followed Quich Many, who matching with Spain, was thereby interested in the wealth of Europe, and needed no other support or inspection; so this concern stood neglected for above 70 years.

### CHAP. XVII.

# QuEEN ELIZABETH.

Bout the third year of Que n Elizabeth, she, by the advice of her Council sent over for some Germans experienced in Mines, and being supplied, she, the tenth of October, in the fixth of her reign, grants the Mines of eight Counties, besides those in Wales, to Houghsetter a German, &c. whose name and Family still continue in Cardiganshire; and doubtless we had much of our knowledge from their Predecessors, who revived this work in Cardiganshire. They also entered upon another work of Copper at Kefwick in Cumberland, being within the Royalties of the Earl of Northumberland formerly granted to him from the Crown, together with all Mines, &c. Whereupon the Earl opposed Hough setter, but the matter being brought to Tryal between the Queen and the Earl, it was the opinion of the Judges, that notwithstanding his Grant the Queen had power to search for Treasure in any ones ground. So that it is good for Princes, and even for mean Lords, to keep a Claim to their Prerogatives and Customes, lest time, as in this case, shou'd cause an opposition. For 70 years intermission made that questionable, which for many ages before was out of question. this

this Suit being ended, (the Abstract of which Proceedings is hereto annexed) to prevent the like occasion for the suture, the Queen (May 28. in the 10th. year of her Reign) erects a Corporation, of which William Earl of Pembroke was the first Governour, and Robert Earl of Leicester, James Lord Monjoy, Sir William Cecill Assistants, and many other Persons of Qualitie joyned, consisting in all of 24 Persons and as many Shares, and those Shares subdividable into half and quarter parts, so that they might consist of 96 Persons, their Votes being according to the proportion they had of Shares.

And this Soc ety was and is entituled The Society for the Mines Royal; and they have the Grant and care of Gold, Silver, Copper, &c. within 8 Engl sh Counties hereafter re-

cited, and of all Wales.

As for the Laws and Rules by which they were managed, they are also annexed.

These Persons thus incorporated by a joynt Stock

wrought several Mines with good success.

The Queen did also in the 7th. year of her Reign grant to William Humfreys and Christopher Shute a German, all Mines, Minerals, and Subterranean Treasures, (except Copperice and Allom) which should be found in all other parts of England, (not mentioned in the former Patent) or within the English pole in Ireland, by the name of Gold, Silver, Copper, Tin, Lead, Quicksilver, Cadmian Oar, or Lapis Calaminaris, and all manner of Eures or Oars, simple or pure, mixt or compounded, for Latten, Wire or Steel, &c.

And also on the same 28th. of May in the 10th of her Reign, the Queen frames the Participants into a Corporation, by the name of The Society for the Minerals and Buttery works. As for their Laws and Rules they are also annex-

ed with the other.

This also was look'd upon as so considerable a matter to the Crown, that Sir Nicholas Bacon then Lord Keeper, the Duke of Norfolk, William Earl of Pembroke, Robert Earl of Leicester, William Lord Cobham, Sir William Cecill,

Sir Walter Myldmay, Sir Henry Sidney, Sir Francis Jepson, Sir William Gerard, with 29 more considerable Persons, Gentlemen, Lawyers, Citizens and Foreiners, were Participants. And this Society consisted of 36 Shares, subdividable also into half and quarter parts; so that it was capable of 144 Shares. And this also by a joynt Stock did effect great things, which turned to good advantage both to the King and to the Society.

# THEMARMS

SOCIETY OF THE MINES ROYAL,
Given Aug. 26, 1568. Anno 10. Eliz.



This Coat is blazened in Page 24, and the other Coat in Page 23. above it.

# Fodinæ'Regales.

As they are Blazon'd.

Silver with a Mount Vert. A Man working within a Mine, with two Hammers and a Lamp, all in their proper colours on a Chief Azure. A Cake of Copper between a Bezant and a Plate on a Wreath Silver and Azure. A Demy man (called in Dutch the Schicht Master) with an Escocheon on his Breast Or and Azure per Bend inverted; in one of his Hands an Instrument call da Wedge, and in the other Hand a Compass, Gold mantled Silver doubled Azure, supported with two Men, the one called the Hammersman, with a Hammer on his Shoulder; and the other the Smelter, with a Fork in his Hand; all in proper colours.

THE ARMS
OF THE SOCIETY FOR THE
MINERAL AND BATTERY WORKS,
Given also Anno 10. Eliz.



# As they are Blazon'd.

The Field Azure upon the Base point Vert, a Dorick Argent, supported by a Lion and a Grysson armed and languid Gules. On the top of the Pillar a Ducal Crown Or. On the Chief an Annulet Argent between two Bezants of the same. The Crest on an Helmet and Wreath Argent and Vert. Two naked Arms and Hands supporting a Cake of Copper proper; the Supporters an ancient Man in a Gown wearing an Headpiece, on it a Cressent, and holding one hand on the Escocheon, in the other a Pickax: on the other side a Woman, holding also the Escocheon with one hand, and in the other a Quadrant.

# CHAP. XVIII.

# KING JAMES.

A Bout the second of King James, both the Societies thought fitto renew their Charters with some Additional Powers (also annexed) and then William Earl of Pembroke was Governour to both Societies, and so continued till his death in an Annual Election.

# CHAP. XIX.

# CHARLES I.

A Free the death of William Earl of Pembroke, in the Year 1630, Philip Earl of Pembroke was chosen Governour of both Societies; and in this Kings Reign (about the Year 1639) there was some Dispute between Sir Hugh Middleton and Sir Richard Price concerning the Mines at Tallabent in Wales, whither Royal or not Royal; and this was also about 70 years after the Tryal with the Earl of Northumberland: Whereupon several Eminent Lawyers subscribed their Opinions (hereto also annexed) and the matter was soon quieted. Then from 1641 to 1647 no Governour was chosen, but the Mines in Wales continued working under Mr. Thomas Bushell, who made them very serviceable to the Martial Concerns of the King during the Civil Wars.

### CHAP. XX.

# CHARLES II.

In the Year 1649 Philip des, then his Son Philip (now living) was chosen Governour of both Companies, and in 1662 the Lord Anthony Ashly-Cooper, Chancellour of the Exchequer, and one of His Majesty's Privy Councellours, was joyned as Governour of both Societies with the Last. In 1668 (the Earl of Pembroke being willing to quit the Government in respect of his retires ment) Pr. Rupert Duke of Bavaria and Cumberland, Knight of the Orde. of the Garter, and one of His Majesty's Privy Councellours, was chosen together with the Lord Ashly-Cooper Governour of both Societies, and the Deputy Go-

Governours of both Societies, are now the Lord Brunker, Sir Robert Murray Knight, Sir John Pettus Knight, Sir Francis Cobb Knight, Col. Ashburnam Cofferer to His Majesty, Thomas Foley Esquire, Edward Swith and Edward Henshaw

Esquires.

The Assistants to both Societies are Col. Ashbumham, Edward Smith, Paul Foley, John Darrell, John Wright, Edward Henshaw, Anthony Knightsbridge, Dudly Dudly and Edward York, Esquires; Henry Kemp, Thomas Hayes, Roger Norton and Richard Reynoll, Gentlemen and Citizens.

The Auditors, Treasurers, Register and Serjeant are chofen by the Governours and Assistants, as occasion re-

quires.

There are other Members of these Societies, of which some do sometimes attend, as the Lord Byron, Sir George Hamilton, Alderman Bond, Mr. Archold, Mr. Palmer, Mr. Clutterbuck and Mr. Squire. Others have not attended for many years past, and therefore I shall not mention them.

The usual place of Sitting is at Mr. Kemps House in Sheer-lane, (who is Register to both the Societies) where all the Books of the Records remain; and either there, or at his Chamber in the Inner Temple, all Persons who are desirous to interest themselves in this Concern, may receive directions and satisfaction.

CHAP.

### CHAP. XXI.

Of other Companies bawing like.
Appellations.

N the Year 1662 His Majesty KING CHARLES II. did erect a Corporation, intituling it The Royal Society for improving Knowledge; whose Studies and Endeavours are to enlighten the World with all Real Experiments in Nature, tending to the benefit of Mankind; and of this the Lord Brunker is President. His Majesty also in the Year 1663 erected another called The Royal Company, whose business is to fettle the Trade with Guiny in Africa concerning Gold and Silver, &c. whereof His Highness the Duke of York is President: so that there being first the Society of the Mines Royal, secondly the Society for Mineral Works, thirdly the Royal Society, and fourthly the Royal Company; it was thought fit to insert their Titles here, that those who have occasion to apply themselves to either of the said Societies or Companies, may not be confounded in their Appellations or Applications.

And these two Societies of the Mines Royal and Mineral Works have been so prudent, as to make several of both the other Societies Members also of theirs, for the better entercourse between them in such publick concerns.

### CHAP. XXI.

Why our Mines, affording Gold or Silver, should properly belong to the King by His Prerogative.

Here the Supreme Power of Peace and War is fixed (as with us it is acknowledged in the King) he ought to have those Attendances to his Power, which may either continue the one, or support the other. And Money (the Product of Metals) being the Ligament of that, and Nerve of this; it is most reasonable, that seeing the Cause is more honoured then the Eff. Et, that He whose very Image and Superscription makes Metal and Moneypassable, should in Politicks have the command of those Mines, to which after some progress of Art and Labour, His mere Image gives the R put ation; for that which we call Intrinsick Value, is still but according to Extrinsick For we find in Hiftory, that Copper, Ten, Lead, nay even Leather, have been in as great esteem; and at this day I on in some Forein parts is more passable then Gold. So that having the effects of its virtue from our Cafars Super. scription, it is just that Cafar should have his due, and all the means and assistances to att in the Essets thereof. Nor doth it appear by any Record, that this Prerogative was ever opposed by any Proprietor: For the Earl of Northumberland's Case (hereaster mentioned, and set down at large by Plowden, concerning the Copper Mines \* at Keswick in that Countie) was onely whether in granting the Manour to the Earl, together with all Mines with= in the said Manour, the Mines also should pals; was resolved by most of the Judges, that though the Grant of the Minour was good, yet the King could not alienate Mines, being perfectly linked to the Prerogative of the Crown: so that this Opposition was rather to e elain his Grant, then to oppose the Prerogative. the

the Queens Deputies workt the said Mine without any further opposition of the said Earl or his Saccessors.

And soon after She fix'd the Conduct of that Affair into a Corporation, reserving to Her Self a proportion of what they should get, and a pre-emption of what was saleable, in case She had use for it; and lest the benefit of the Mines should exceed the bounds of a Subjects Fortune, She reserved to Her Self and Her Successors a Powerat any time to reassume the management of those Affairs to Her Self, paying to the Corporation such Compensation as should be indifferently awarded.

# CHAP. XXIII

Why the Government of the Mines was by Queen Elizabeth committed to the Conduct of Corporations.

S it is conceived, the first Reason of the Queens committing them to Cerporations was, that the Crowns Prerogative therein might be permanent;

for our Laws say that Corporations never die.

Next, that the Arts, Methods, Rules and Orders, by which they were to be conducted, might be registred by them for the use of Posterity, which in former times were but loose und uncertain, and died with the Undertakers; for no former extant Records do assist us herein. And this makes other Nations so famous, because by way of Corporation they entail their Arts and Manusastures to their Successors, thinking them no derogation to any of their other Degrees of Honour, to which they have by those Arts or otherwise atchieved. And the Romans were so strict herein, that when any Artificer died, the Heir of that Artificer was convened before Judges about the things of that Art which he professed.

The third reason was, from Her observation of the Inartificialness of former Ages in this Concern; which

may be collected from Her fending for and imploying fo many Germans and others Foreiners, (where Mines were plentiful, and the Arts belonging to them) who might put us into the tract of managing ours in finding and diging them, and in Intling and refining Metals. And therefore the Queen provided in Her Charter, that 8 Foreiners might be admitted, and upon such admission of any Foreiner, he was to have Lette's Patents for his Indenization without Fees or Charge; and not onely they, but all persons interessed in these Operations, are to be discharged of all Fifteenths, Ten: hs, Subsidies, Taxes Impositions and Charges, except such as are excepted in the Patent and all Officers, Miners, &c. to be free from Juries and Arrests, for which the Civil Law (which is the ground of most of our Lows concerning Arts) gives this reason, because the Charge, Care, Circumspection and Labour (if duly executed) are so great and advantageous to the Publick, that it was thought but reasonable by the Rimans, and by their example for us, to give them encouragement by fuch Concessions.

And that this Nation was so unknowing in the guidance of this Assair, is evident from the great quantities of Sligs from Lead, and Cinders from Iron, which by former Ages were thrown aside as of no use, but to mend High ways, or to build with instead of Stone. But of these our present Arists do make as great if not greater prosit, then of fresh Oars; for which though Philosophers give some specious reasons, yet their goodness may rather be imputed to the desect of former skill, in not duly melting and resiming them, then from any improvement of their Nature by so long lying under the Concoction of

Heat.

A fourth reason was, that Arts and Sciences might be improved, and in their very Improvement rewarded; Curiosity being not so prevalent a spur to Knowledge as expectation of Gain. Now of the Seven Mechanical Arts, viz. Agriculture, Clothing, Navigation, Hunting, Architex

Eture.

Eture, Medicine and Martial Discipline; and of the Seven Liberal Sciences, viz. Grammar, Logick, Retorick, Astrologie, Geometrie, Acithmetick and Masick; they who deal in the Conduct of Mines must be well versed in at least five of the Seven Arts, and sour of the Seven Sciences. And though the first Incorporations consisted but of 60, yet they had power to take in 240; and really whatever at present men may think) that number is scarce sufficient (as may hereaster be shewn) to carry on so great an Assair.

For it may be confidently affirmed, that as to all Metals (except Gold, of which we have but a small quantitie) and useful Minerals, no proportion of Ground in Europe affords better of all forts (and Quantities enough for our own uses, and to supply others with good advantages) then this Island of Great Britain and I eland; for though Scotland be not under our Conduct, yet it is known that

there also are good Mines.

But the fifth and chief reason of those Incorporations (as is conceived) was, that they might stand as Mediators between the strictness of the Kings Prerogative, and the Subjects presuppositions of an Equitable propriety. And this was the great Prudence of that Queen and Her Council to erect such Moderators, lest supon mistake of the Earl of Northumberlands Case, or other Foundation from the Irresolution of the three dissenting Judges of the twelve) others might raise surther Disputes.

### CHAP. XXIV.

The profits and advantages which were made by the first Incorporators, as well to the Crown as to themselves, by the several Mines and Works at first wrought by them, and what those were.

A Feer the Suit determined between the Queen and the Earl of Northumberland, the Society did erect several Mills and Works at Kefwick in Cumberl. under the conduct of Howceter a German, where they had plenty of good and rich Copper oar, which afforded great profit to themselves and the Nation. But by the death of the fiest German Artizans, and the neglect of a continued Sto k, and want of Fuel in those Parts, and the succeeding Wars, all those Mills and Works stand ready (though much out of repair) for the Ingenuitie of the present Incorporators or others, which in due time may be taken into confideration. And as encouragements it appears by the old Books, that for many years there was very great profit made of them, both Publick and Private: and it may be evider ced that all forts of Copper and Brass Manufacture might from thence receive both for Our selves and Foreiners; these maintained no less then 4000 Artificers and Labou=

Iron Wier Works. rers daily.

The other great Work was of Iron at Whitbrook and Tintorne in Munmothshire, for the working of Iron Wier for Cards for Woollen Cloth, which is still kept in work by Mr. Foley, now Treasurer to the Society. This also yielded a great benefit to the Nation, and to the Society; but by reason of the Acts of Parlement made against importing of Forein Wier are something imperfect, and for other reasons, they afford little: to which also the Society will doubtless have more regard, because it concerneth somewhat the good or ill of the Clothing Manusacture, by the

· Copper Works•

exportation of our Wier, and importation of Forein Wier; and this Work, and other Iron Works which support them, did also imploy at least 4000 Men dailie, and so have done for many years by Mr. Foley, whose Examp'e herein ought to be recorded to Posteritie for imitation.

There were also other excellent Works of Latten and Latten and Brass Manufactures in Nottinghamshire, conducted by works. the Lord John Byron, and others about Lindon; to which was allowed a large Stock, for they let on work no less then 8000 Men daily, and did produce great advantage to the Crown and themselves. But these Latten and Brass Wo ks are decayed, and those Arts almost gone with the

Art. sts, which ought to be confidered and revived.

The chief Mines which produce Silver now in working Silver (though not effectually) are those Mines R yal at Cooms Mines. Sumblock, and the Darren H. Us, Coommervin, Cogincan, Tallabort, Cooma fruith, Tredole, Thruscott and Rosevawre; which were the old Roman Works. Near to which are conveniently placed the Smelting and Refining Mills, which therefore are called the Silver Mills. All which are Silver Mills in the Township of Skibery Coed, in the Parish of Llanny Hangell Gonne Glynn, alias Llany Hingell Caftle Qualton,

in the Councie of Cardigan, alias Shire Abertivy.

These five great Works were wrought for many years with the joint Stock of the first Incorporators, under the Conduct of themselves; but afterward Sir Hugh Middle. ton undertook those in Cardiganshire, paying 400 l. per annum Rent to the Society, and he cleared Monethly the fumme of 2000 l. and had he not diverted his Gains to the making of the New River from Ware to London, certainly he would have been Master of a Mass of Wealth; but great Wits and Purses seldom know how to give bounds to their Designments, and by undertaking too many things, fail in all. And we may further give credit to the Beneficialness of those Mines, whenas Mr. Thomas Bushell, by his Knowledge and Ingenuitie to work

them to the best advantage, did sind business enough there for a Mint, and with the Product thereof made provision for the Clothing of the late Kings whole Army. These two last are particularlie mentioned, that the Product of the others may be collected by the Instances of these.

And as for the advantages which the due management of these would produce, they are hinted in Chap. V. & VI. But it might be added with a submissive Considence, that with due care herein we might give Law to all Europe, as to all Utensils of Metals, whether considered Domestick or Publick, Civil or Martial.

And the Advantages being so, we may justlie infer, that by the not dulie and carefullie managing of this Affair, the Disadvantages are in the same degrees as much prejudicial to the Interest of this Kingdom, as the due use

of them would be profitable.

For it is clearlie demonstrable, that everie Year for manie Years past, this Kingdom hath by negligence herein lost a Million of Money, which by vigilance they might have saved: whereby we want when others abound

with our own natural Store.

To give a particular Demonstration of these Five Works would make this Treatise too large; but because it may be satisfactorie to some Persons, by a Scheme or Map to see the Manner and Position of the Silver Mines, whereby they may judge of others, here is affixed a Plot of the Mines at Come some some such in Cardiganshire, as also an account of the Materials and Number of Men belonging to them, with the Officers for the Mines, Mills and Mint; for the better direction to such as may undertake the like.

A Map of the Mine of Come-some-luck.



# THE DARREIN HILLS, OR ROMAN WORKS.

A 1,2. The old Roman Fort,

The Roman Trench through and crofs the Hill;

The Mine Works.

A great space of Ground never wrought.
The Shafts to the Mines.
The Small Brooks which divide the Hills.

The Places for Adits to the Mine.

A Trench croffing the Darrein Hills to find Oars The Rake of the Mine.

A Passage for Horses to carry Oar. Another Trench for that purpole.

# CHAP. XXV.

# Of the Silver Mills.

Bout three miles from Tallibont there is a certain Stream of Water, which falls into four great Wheels, whose Turning guides the rising and falling of the Bellows, and Stampers which belong to the Hearths and Furnaces, for Smelting, Stamping and Resining. And that the Nature of them may the better be known, here followeth a Particular taken in Anno 1667, of all Utensils and Attendances to them belonging.

# At the great Smelling Mills.

Five Hearths with Backs, Cheeks, Workstones, Iron Plates, and other necessaries.

Five Pair of large Smelting Bellows with Beams, Frames, Swords, Triddles, Cogs, and all things to them appertaining; one new large Water wheel with Water-troughs, Sluces, and other necessaries convenient for working the said five Hearths.

One great Pair of Scales, with ten Half-hundred Weights of Lead, and other small Weights needful.

Three Wooden Measures for White Cole, six Wheel-barrows, six Shovels of Iron, with Iron Forks and Tongs, sive Moulds, and a Ladle for Casting.

And to these belong to Men, and these five Hearths 10 Men.

may well imploy 500 Miners.

# In the Oar-house.

One great Beam with Scales and Iron Chains, and several Weights for Oar.

r Man.

I Man.

In the Old Mint-house.

One Pair of small Bellows, one Wind-Furnace to melt Silver in, made with Brick and Iron bars; one large Beam of Iron, and Brass Scales, with several piles of Brass Weights, and other Weights to weigh Silver with; one great Iron bound Chest with three Locks, formerly used for the Coyners there, with old defaced Stamps therein, one Table-counter with Cupboards, Shelves, &c.

I Man.

ı Man.

# In the Stamping Mills.

One large Shed lately erected over certain Stampers, with a new Frame for them; three sets of Stampers, one for wet Slags, one for dry, and one for Bone-ashes, all saced with Iron, and beat upon great Iron Planks cast for the purpose only; one large Water-wheel with Troughs, &c. for drawing the said Stamps, and the annexed Mill to grind Bone-ashes, with a pair of Stones, and all things necessary for Grinding and Sisting bone-ashes in order to Resining.

I Man.

1 Man.

One Smiths shop with Bellows, Tongs, Anvils, Hammers, Vice, Sledges, Grindstone, &c. thereunto appertaining.

I Man.

1 Man.

Six great Tubs (of Cask) Buddles, Sieves, Rakes, Shovels, and other necessaries for washing and cleansing of Slags.

I Man.

2 Men.

# At the Refining Mill.

Several Troughs and Sluces for the conveying of Watertothe Mill, one large new Wheel, that carrietly three

three Pair of bellows, with Swords, Beams, Truddles, Frames, Cogs, and all things appertaining in good order-

One Pair of very large bellows for the Test onely, with a great Frame or Model of Iron cast, to make the Test in, with a great Cap of Stone in a Case of Iron fit for Refining; as also an Engine or Winlace, with Ropes and Pullies to draw up the same, with several Refining Irons, Feeding Plate of Iron, Tongs, Furnace with Iron door, grates, and bars of Iron, &c. necessary thereto, one pair of reducing bellows and furnace to melt the Litharidge into Lead, after refining with Irons, &c. necessary thereunto. A stable despite some roding to

2 Men? vous vente nierd :

One Pair of bellows and Furnace for melting of Slags. with Iron bars, Shovels, &c. necessary thereunto; one planck'd Plate for tempering the bone-ashes with beaters, and a Room made fit to lay Corn in. 2 Men. Dus , giving

2 Men.

# A the Red Lead Mill. O ...

One great Water wheel, with several Sluces, Troughs and Dams thereunto belonging; four Pair of stones for grinding Red Lead, one large Oven with several Chimnies for making and colouring Red Lead, with Iron forks. Rakes, Shovels, &c. for the same; as also one great Iron Door and Door : case to the said Oven, and two other Iron Doors in Iron Frames, with Iron gates and and bars to the Fire-hearths of the faid Oven. One great Copper Bason to wash Red Lead in, one Iron Ladle, Tunnel, &c. one great Beam and Scales to weigh Red Lead with, several sets of Coopers Tools, great Plains, &c. necessary for making Red Lead Cask.

2 Mcn.

# Materials at the Mines Royal.

At Tallahon' three great washing Tubs, two brass wyer Sieves, one Beam and Scales with Weights for Oare, one great Trewerne with Iron wheels to carry out deads belonging to the Addits, as also Pumps, Timber, Ropes, and other necessaries belonging to those works. ans beading Place o. c arafaWas, Furnace with 1

At Coginian, one Smiths shop with Bellows, Anvil. Hammers, Sledges, &c for sharpning of tooles for the works, fix tubsc several Iron Riddles, Sieves, Buddles, Rakes and other necessaries for dressing of Oare, with Washers, one beam, scales and weights for weighing thereof, several Pumps, Ropes, Timber, &c. belonging to the faid work.

of drive andle or . Walhers 2. Town to tought !! look &

Also several tubs and tieves for dressing of Hillock Oar at Coomervin, and Coomsumblock, with Timber, Pumpes, and Scales to weigh Timber therewithall, a d four dozen of Oare bags to lie in the Carriers hands and Custody.

Tokeep hese Mineral works in constant repair, there is alwaies besides the Smith, a Carpenter continually at-

tending and h

Officers necessary to be imployed by the Society.

A Treasurer. 2. Correspondents. A Supervisor of the Mills and Works.

One Master worker, or Cheif Steward, who ought to understand the whole concern of the Mills and Works, both as to Smelting and Refining, and all materials thereunto belonging, as White coal, Black coal, and Charcoal, and also to be able to affist the Steward of the Mines in making contracts with the Miners, the best and savingest

way for the good of the works, and the undertakers.

One Under-Steward to recide at the Mines, and to attend the Miners and their works, and to see they work them fairly, and according to their Contracts, and also to dyal and level the works, and as occasion requires to provide Timber and other necessaries, and to see the Oare well cleansed before it be sent to the Mills, and to keep an account thereof as it is sent in by the several Carriers.

One Paymaster to be a good Accomptant to recide near the Mills to pay the several Miners and workmen, their Accompts being first made up by the Master-worker and

Steward of the Mines, and fairly entered by him.

One Clark as an ordinary person to attend daily on the Mills, to receive in, and see measured and weighed, and to deliver out by measure and weight all Worte coale, Black coale and Oar, as they daily come in; and to keep an exact accompt of all Oar delivered to the Smelters, that the Mill Book may agree with the Stewards of the Mines.

Also one Carpenter and one Smith.

Besides these there are about 50. or 60. Carriers, according to the quantity of Oar; raised with horses, who usually carry two bags of Oar, containing 200. weight, which they deliver to the Clark imployed for that purpose, who is constantly to attend the bringing in thereof, who keeps several Tallies with such Carriers as brings the same, which Tallies (the Carriers being gone for more Oare) are fairly entered by him which keeps the Mill Book, by which the quantities are known, and from which works such Oar comes, and when the same is delivered forth to the Smelters to be wrought, he which keeps the Mill-Book and stands charged therewith, delivers the same to the several Smelters that are to work it, and keeps an exact accompt thereof, by which the product of the several Oars doth more certainly appear.

These are all the Officers and Agents needful, unless upon great encrease of works and workmen, and then

F. Anni 4

140x 4 5.

one other Steward to assist at the Mines, to see the Oar clean and weighed, will be fit.

The Myners are to finde themselves Iron, Steel and

Candles at their own charge.

The M. sters are only to finde Tymber for the Works, and Ropes, Pumps, Tubs and Sieves to cleanse the Oar, and

Bags to carry it to the Mills.

Now this Master-Worker, Chief Steward, Chief Essay-Master, or Chief Refiner (for these are his several Titles) answering the greatness of his Trust, for he is as it were Judg, between the King and the People, his Prerogative and their Propriety, by distinguishing Mines and Oars, and by Assaying the Oars, he is to give his judicious determination therein, sounded on the Artisticial Method before-mentioned. And being thus formed in Ingots, Cakes or Dollers, they are usually in gross called Bullion.

### CHAP. XXVI.

Of the Mint and Officers belonging to it.

THE Silver and Gold being thus extracted into Bullion by Labour and Art, certain Officers of the Socieries, or of their Lesses, are obliged to carry it to the Kings Mint, which fignifieth with us the place where the Kings Gold, Silver, or other Mertall is coyned or formed into such shape, or with such distinguishing Impressions as he thinks fit. This Mint is at present, and long hath been in the Tower of London: But it appears by several comes of Silver and Gold, that there was a Mint at Danwich in the County of Suff. in the time of Hen. 2. and hen. 3. Afterwards at Callice, and of late years one crected at the Silver Mills in Cardinanshire, and at Strewsbury, and in other pares of the Kingdom, according the Kings occasions. The Off cers belonging to it have not been always alike, but at this present they are these.

The

The Warden, who is the Chief of the rest, and is by his Ward n. Office to receive the Silver from the Goldsmiths, and to pay them for it, and to overfee all the rest belonging to this Function; his Fee is 100 l. per Annum. The Master-Motor worker, who receive the Silver from the Ward n, cau= mirker. feth it to be melted, and delivereth it to the Mon. ers, and taketh it from them again when it is made; his Allow. ance is not any set Fee, but according to the Poundweight. The thi dis the Comptroller, who is to see the Comptroller. Mony be made the just Assife, to overfee the Officers and controll them if the Monie be not as it ought to be; his Fee is 100 Marks per Annum. Then is the Master of the Assay-ma-Affay, who weigheth the Silver, and fees that it be according to the Standard; his Yearly Fee is also 100 Marks. Then is the Auditor to take the Accounts and make them Auditor. up, and audit them. Next the Surveyor of the Melting, Surveyor. who is to see the Silver cast out, and not to be altered after it is delivered to the Melter, which is after the Affay-Master hath made trial of it. Then is the Clerk of the Irons Clerk of the to fee that the Irons be clean and fit to work withall. Then Irons. the Graver, who graveth the Stamps for the Monie. Then Graver. the Smiter of Irons, after they be graved, smites them up: Smiter. on the Monie. Then the Meiters, that melt the Bullion Melters. before it come to the Coining. Then the Blanchers, who Blanchers. do anneale, boil and cleanse the Monie. The Porter, who perter. keeps the Gate of the Mint. Then the Provost of the Mint, Provost. who is to provide for all the Moniers, and to oversee Moniers. them. Lastly, the Moniers, who are some to sheer the Monie, some to forge it, some to beat it abroad, some to round it, and some to stamp or coin it; their Wages is not by the Day or Year, but uncertain, according to the Weight of the Mony Coined by them. There are other ingenious ways used by Screws, &c. which may be seen at the Tower in London.

# CHAP. XXVII.

Of Money.

Etall being thus Coyned or Minted, it is called Coyn from Cudere to forge, or from Communis, because it is then made common, or from the French word Coigne, which signifies a Corner, because most of the Coynes anciently were made with Angles, and some at this day in Spain and France.

Or it is more probable, Vorstigan makes King and Cuning Syn nyma's, so may King, Cuning and Coyning; for his Regality is shewn by his Coyn, and to know the intrinsick value, use and allays fit for Coyn, she ws his Cunning; for we use that word to express a subtility, or ex-

quisite knowledge of any Art or Science.

But the Romans had three names for Coyn; Pecunia from Pecora, Cattel; because men who abounded in Cattel were accounted rich, and call'd Pecunii; and now those who abound in Coyn are called Pecuniosi; The other name they gave was Nummus from King Numa as its conjectured, who sist gave an Impression on them; or from Numero, and therefore when money was paid, they say, and so we in our Law, it was paid Pecuniis numeratis.

But it may as properly come from Numen a Deity, for the Romans had Tutelary Gods for every thing, and those who write of Jubterranean spirits (if credit may be given to their stories) would induce us to believe the same, and indeed our Welch Miners are of that opinion: for, say they, when we approach to the Master vein of a Mine, or near to any danger by digging too near the irruption of waters, they usuallie here knocking, which they call the Knockers, or a noise like that which their own Pickeaxes make, both in expecting prosit, or shunning danger,

(A Discourse of this is printed by Mr. Bushell, which hapned in the Mines at Tallabout in Wales:) and so the Knockers may be called Numina Mineralia, or the Tutela-

ry Subterranean Spirits of our Mines.

The third name they gave it after it was Coyned or Minted was Moneta, which we English Money, and St. Austin says it was derived from Monere, to admonish, and as it were to warn us, that all our disposals of it, should be Honest, Just, Honourable, and to Charitable Ends.

# CHAP. XXVII.

# Of Artificial Metals and Money.

He Manner of Adulterating and Sophisticating Metals and Moneys, is an Art belonging to Alchimy. and not properly the subject of this History. But in respect that by the Artifices of that Art our Staple and Stan= dard Corn is abused, the baser Metal being so overlaid or tincturd, that the Eye is deceived, or so curioustie intermixed with bafer Metal, or other Ingredients, that the very Judgments of lesser Artists are also deceived, (especiallie when neither Touch nor Fire, (only weight) can distinguish them from better Metals) it is necessarie to have some remedies against such Impostures: it seems there were of these subtilties practised in former Ages; for we finde in Poultons Statutes, jof Hen. 4. cap. 24. these words, Item, It is ordained and established, that none from henceforth shall use to multiply Gold or Silver, nor use the craft of Muliplication, and if any the same do, that be incur the Penaltie of Felony in this case: which this Statute calls Multiplying and Multiplication, is either by counterfeiting Metals, or adding greater Allay then the Standard allows, or by dipping, or otherwise lessening their due weight and proportions, and this Statute had so good effect, that our Records take no more notice

of such Artists, till near 50 years after; for Mr. Frinn in his Aurum Regina faith, that in the 34th. of the Reign of Henry VI. the King, by advice of his Council and Parliament did then grant 4 successive Paten's and Commissions to several Knights, Citizens of Lendon, Chemists Monks and Mass-priests (non obstante the Law of Henry IV.) to find out the Philosophers stone or Elixir, which would not only cure all Diseases, and make Men live to the utmost possibility of Nature; but likewise transubstantiate ocher Metals into most true and solid Go'd and Silver, to the great benefit of the Realm, and the enabling the King in very few years to pay all the Debts of the (roun in real Gold and Silver ; and their Comm Sions and I atent (faith he in his Marginal Notes) the King granted to Eccl siaflicks upon this very account, that because they were so good Artists in Transubstantiating Brisa and Wine in the Eucharist, they might as well transubstantiate baser hietals into better. But it feems the King (upon better advice) did in the 35th, of his Reign grant new Letters Patents to ten several Considerable Persons of Eminent Qualities, (therein mentioned) to judge and certifie to Him whether the thing were practical or no, and whether it would conduce more to the good or hurt of the Kingdom. But it feems Mr. Prain with his indefatigable Labours could not find any Report upon the Patent, whether or no the Philosophers stone was found, or whether the Kings debts were paid thereby; or else he reserved that secret to himfelf.

However our Laws take little notice of them till the 7th. of Edward VI. in Dier 88. when one Eden confessed himself guilty of Multiplication, viz. that he had practised to make the Fifth Essence, and the Philosophers stone, whereby all Metals may be made Cold and Silver; and also that he had accused one W bally then Prison er in the Tower, that he did move and procure him to practife that Art, and that Whally had imployed Monie for red wine and other things necessary for that Art; and because the offence

offence was but Felony Eden the Principal was pardoned by the General Pardon, but Whally as Accessory to the Felony was excepted, as one of those who were then in the Tower.

Now besides the former Reasons this may be added as one very probable, why the Queen did frame these Corporations, viz. that they might fee and inspect those Impostures and Sophistications so destructive to Commutative Justice, and to represent the Reformation thereof to Her Self, or to those which should succeed Her, whether done by Foreiners or Natives. Nor was there ever more ground for the same then in this Age, where the Arts of this nature are so much practifed, lest their Delights (which in themselves are commendable, producing most admirable estects in their several Operations) should tempt men to make the innocent and unskilful to receive those things for real and natural, which are but adulterated by their Aris. And therefore this History was writ, that the Societies may be known, and the Persons who at present conduct the same, and that their aim is not at the Philosophers stone, Elixir or Quintessence (which though several in name are one in intent) but their chief business is to take care that the productions of our Mines and Metals may go to their right use, that is, for the publick good. And therefore to conclude this First Part, whoever Thall aim at this Philosophers stone, according to the agreement of all Writers therein, they must be Men of upright and unblemisht Lives and Conversations, free from Vice. and practifers of all Moral Vertues, Contemners of the World, and onely thereby to study the publick good of others, and not enriching themselves, and from such there is no fear of danger, because their Study is onely to do good and not to deceive; nor is there much danger in the other, who under pretence of gaining this Rarity do but delude themselves and others, because their Impostures may foon be discovered by that Wisdom and Care which properly belongs to these Societies, and humbly recommended to them. THE

# SECOND PART

# HISTORY

OFTHE

Mines Royal.





THE

### SECOND PART

OF THE

HISTORY of the MINES ROYAL.

#### CHAP. I.

An Abstract of the Original Grants of the Society of the City of London, of and for the MINES ROYAL.

İ.

Q

Patents, dated the 10th of October, in the 6th. Year of Her Reign, did grant unto Hough setter and Thurland, and their Heirs for ever, Licenseto search for Mines, Oars or Ewres of Gold, Silver, Gopper or Quicksilver, in York shire, Lanz

cashire, Cumberland, Westmerland, Co nwall, Devon, Gloncesters shire, Worcesters bire, and in Wales; and to try and convert the same unto their own profit, so as they search not under any Castles, Forts, &c. nor within any Houses, Gardens, &c. of any Subject without their consent, making recompense for all damages. 2. None to dig or search for Mines Royal without the License of Haughsetter and Thurland.

3. Power to purchase Lands within those Counties or

in Wales, as any other Subject may do.

4. None to attempt within 20 years to use any Instruments or Tools which they use, and hath not been used within 20 years last past, nor to use their manner of rosting.

5. Power to take up at reasonable rates and prizes Work-

men, Timber, Wood, Coals, &c.

6. All Mayors, Sheriffs, Justices, &c. to be affishing to them in their Searches; and to apprehend others that shall attempt to work or use any Tools contrary to this Grant, and to commit them to Gaol.

7. No former Grant to be prejudicial to this Grant.

8. A Proviso that the Patentees shall use their Privileges joyntly and not severally.

#### CHAP. II.

An Abstract of the Indenture of Covenants of the 10th. of Octob. 6 Eliz. between the Queen and the Patentees.

1. The Queen reciting Her former Grant did covenant not to give Licence to any others to fearch or dig, &c. in those 8 Counties, or in Wales, and that none shall search, &c. without consent of the Patenters, and that She will hinder all others, &c. And that She will deface and destroy all Tools, Instruments, &c. save onlie the Patenters.

2. Thurland and Hough setter covenant that the Queen shall have the tenth part of all Gold, Silver and Quick silver found, neat without melting, the tenth part of all Gold and Silver Eure holding 8 pounds weight or upwards in every 100 weight; and the precomption of all Gold or Silver

Silver found neat or tried, paying & d. per ounce for Gold, and 1 d for Silver, less then the common rate; and for the first five Years 2 s. for ever 100 weight of Copper, of the 20th. part, at Her Majesties Election. And after the first five Years 2 s. 6 d. or the 15th. part, at the Queens Election; and to be supplied with Copper upon a Years notice, paying as others, but in case the Queen do not require it, they may transport it, paying Custom and Subsidies.

3. If the Patentees shall find a Mine where they cannot conveniently have Wood at reasonable prises, they may transport the Oar, paying half Duties for every 100 weight of Copper after the rate of 40 s. and so much ready Monie

as the Queens Part shall amount unto.

4. A Covenant from the Queen that no former License shall be prejudicial to the Patentees, but they shall be pre-

ferred before others.

5. A Covenant from the Patentees, that if they find any rough Pearls, &c. the Queen to have the 10th. part, and preemption of the rest, paying ready Monie; and such portion of Tin as the Queen had in Cornwall, and of Lead, as was accustomed in other places.

6. A Covenant from the Patentees, that they will bring the Queens part of Copper and Tin to the place of Coinage in everie Shire, not above one mile distant by Land from the Melting place, or 12 miles by Water, to be weighed

and marked, &c.

7. A Covenant from the Queen, that they and their Partners, not exceeding 24, whereof 16 to be English, shall be discharged of all Fisteenths, &c. and other Taxes, so their Names be certified into the Chancery within six Moneths, where they may have their Warrant of Allowance, &c.

8. A Covenant from the Queen, that they may bring in fuch Strangers as they need to work, being no Enemies, and to be received into the Queens protection, and to be Indeni-

zon'd if they will.

Tallagure Jana

o. A Covenant from the Queen, that they may bring in Victuals, and Tools, and Instruments for the Workmen and the Works, as they shall need, without Custom, &c.

so as Entrie be made thereof in the Custom house.

After this Grant followed the Suit between the Queen and the Earl of Northumberland before mentioned; and upon a long Debate, and great Learning shewed by all the Twelve Judges, as may be fullie seen in Plowdens Reports, Nine of the Twelve Judges gave their Judgments according to the substance of this following Abstract.

#### CHAP. III.

An Abstract of the Opinion of the Judges concerning a Mine Royal, in the Term of Saint Hillarie, in the tenth Year of Queen Elizabeth, being the Conclusive part of Plowdens Reports, concerning Mines.

Here is a Diversitie between a Mine of Copper, containing in it self Gold, and a Mine of Gold containing in it self Copper; for when the Mine is called a Mine of Cop= per, containing in it self Gold, it is intended the Copper is the greater, and the Gold the less; for everiething contained is less then the thing containing, and that which comprehendeth a thing is greater then the thing comprehended; and therefore where the Copper is the greater, the Mine takes his Name from that, and is called a Mine of Copper containing Gold: and by the same reason, if it be called a Mine of Gold containing Copper, the Gold whereof the Mine hath its Name is the greater, and the Copper the less. And this agrees with their Opinions who have treated of Metallick matters, and with the Records of the Exchequer, which prove that the King hath the Mines of Copper containing or holding. Gold or Silver, although the Gold or Silver be the les.

But how it shall be esteemed the greater or lesser is the Dispute; that is, whether it shall be taken according to the quantity, or quality, or value thereof. Some are of opinion according to the quantity, faying, that that thing which comprehendeth an other, is greater then the other thing comprehended; as a Hogshead of Wine, or a Barrel of Beer, for the Hogshead in quantitie is greater then the Wine, and the Barrel then the Beer, but not in value; and yet it takes his name from the greater, and therefore is called a Hogshead of Wine. And the Mine of Copper containing Gold hath its name from the greater in quantibut not as from the value, for in the Mine of Copper containing Gold the Gold may be of the greater value. And herein regard ought to be had to the value of the Gold or Silver; for it there be but a Quill full of Gold or Silver in a great quantitie of Copper, there is no reason that that small quan ity should be respected; but the Gold or Silver ought to be of some value of it self, over and above the charge, and over and above the bale Metal confumed in getting thereof; for if the quantity of the value be not respected, then the Gold or Silver (how little soever they be) shall entitle the Crown to all the Mines of base Metal in the Realm. For the Writers of Metals do agree, that there is naturally some proportion of Gold or Silver in every Metal; and the Smelters and Refiners do make it evident, that there is in Copper naturally Gold and Silver, and in Lead and Iron there is naturally Silver. And so if there should be no regard had to the quantity of Gold or Silver which is in the base Metals the King should have all the Mines of base Metals in the Realm, and the Subject having Mines of base Metals in his own Lands, they are of no effect: for there is not (according to the said Authors) any such Mine either in this Kingdom or elsewhere, which hath not some Gold or Silver in it.

And therefore it seemeth reasonable to consider the nature of a poor Mine, and the walue of the Gold and Silver in the base Metal; and that the Product be of such coalue,

that it countervail the charge of getting it, or otherwise there is no reason that it should draw the Propertie of the base Metal to the Crown; but is otherwise, then it is to be a Mine Royal.

#### CHAP. IV.

An Al strast of the Letters Patents dated the 28th. of May, in the 10th. Year of Q. ELIZABETH. Incorporating for ever the Society of the MINES ROTAL.

I. Eciting the Letters Patents granted to Tho. Thurland and Daniel Houghsetter, dated 10 08 b. in the 6th. Year of Her Reign, &c.

2. Grants Power to assign to any Person or Persons Parts and Portions of their said Privileges, Immunities, &c and ratifies and confirms all Immunities, Licenses, Pri-

vileges formerly to them granted.

3. Grants the said License, Immunities, Privileges, &c. unto William Earl of Pembroke, Robert Earl of Leicester, Fames Lord Montjy, Sir William Cecill, Knight; Tho. Thurla d Daniel Hong fetter, John Tanworth, and Jo. Dudiey, Esquires: Li ne Ducket, Citizen and Alderman of London; Benedict Spinola, of L ndon Merchant; Jo. Loner, Will. Winter, Ant Dany Ducket, Roger Wetherall, Rich. Spring. bam, Jeffry D cket, Rich. Barnes, Will Platten, Tho. Smith, Will Birde, Gent. Daniel Ulstet, a German; Mat. hew Fild Goge Needham, and Edmund I hurland, all the faid Privileges, &c. and Incorporates them for ever, and their Successors, by the Name of The Governours, Asistants, and Commonsity for the Mines Royal, and so continue for

4. Enables them by that Name to turchase Lands, Te= nements, &c. and to alien, let or let the same, and to sue, impliad &c. and to be fued, &c. in any Court before any

fudge

Judge Spiritual or Temporal, concerning any the Affairs belonging to the said Governours, Assistants, and Commonal ty, &c.

5. Power to chuse one or two Governours, one or two

Deputy-governours, and fix or more Asift ints.

6. Ordains Lionel Ducket and Daniel Hough setter, the first Governours; Anthony Ducket and Daniel Wistet the first four Deputy governours; so Tamworth, Tho. Thurland, Benedict Spinola, John Loner, Will. Winter, and Roger Wetherall, the first Assistants; untill the first Monday in May 1569, and thence if need be till others are chosen.

7. Power to keep Courts, to elect Office s, to make By-laws, Asis and Ordinances, when and where they please within, &c. and to admit more Members English or Strangers, &c. and to revoke Rules, Ordinances, &c. Every Member to have half a quarter of a 24th. Part, or a Gentleman of 40 Marks per Annum in certain Counties a quarter part at least.

8. To rule and govern Officers, Ministers, Workmen and Labourers according to the Ordinances, &c. and to remove Members, and impose Fines, to purchase Lands, to elect one or two Officers who are called Serjeants, to collect

the Fines, and to arrest Body and Goods.

o. Their Precepts to be obeyed in Cities, &c. and all

Officers indemnified for their obedience thereto.

10. A Member having a Quarter part, his Voice is as good as two Members of half Quarter parts, and so of the rest greater Parts proportionably.

11. All Mayors, Sheriffs, &c. to be assisting.

#### CHAP. V.

An Abstract of the Indeniure of Covenants between the Queen and the Corporation.

Y Indenture dated the 16th. day of June in the 10th. Dyear of Queen Elizabeth, made between the Queen of the one part, and the Corporation of the Mines Royal of the other part; reciting the Indenture of Covenants of the 1 oth. of O & ber in the 6th. year: The Companie did covenant with the Queen to pay, deliver, observe, perform, fulfill and keep all Paiments, Customs, Subsidies, Coinage, Summes of monie, Gold, Silver, Precious stones, Pearls, Copper, Parts, Portions, Preemptions, Covenants, Grants, Articles and Agreements in that Indenture specified on the Patentees behalf to be paid, delivered, reserved, performed, &c. And that the Queen shall have all such Paiments, Summes of monie, Customs, Subsidies, Coinage, Duties, Gold, Silver, Precious stones, Pearls, Copper, Parts, Portions, Preemptions, &c. which the Patentees had covenanted the Queen should have.

#### CHAP. VI.

An abstract of the Grant of the Mineral and Battery-

Humfrey and Christopher Shutz all manner of Ewres simple and pure, or mixt and compound, of the Metals of Gold, Silver, Copper and Quicksilver; and all other Minerals and Treasures likely to be found in Earth or Ground in England, Wates, and the English Pale in Ireland; and of Tin and Lead in such fort as by Law is or hath been used, (Copperice and Allom, and the Mines in the last

Patent excepted.)

2. Therein is granted Power to dig, to build Houses, not to dig under Houses, nor in the Mines in the last Patent excepted, without consent, indifferent Persons to award a recompence; none to use their Tools or Instruments, or to dig for 21 Years, Disturbers of Workmen to be committed for six Moneths without Bail or Mainprise; to take up Necessaries for the Work, as Wood, Timber, &c. at reasonable rates; and it the Queen be minded to work any Mines without the English Pale, then William Humf ey and Christopher Shutz shall have like Privilege and Power as if the same had been granted.

3. Free for the Queen to resume this Grant for Her proper use onely, and not to grant it to other Persons; their Charge, Loss, Expence, and Interest to be allowed by six indifferent Citizens, whereof two to be Aldermen, to be equally chosen; the Referrees to deliver a Certificate of the Charge to the Lord Treasurer, who is to make paiment rhereupon; and if after Resumption the Queen shall decline the working, then William Humfrey and Christopher Shutz, their Heirs and Assigns, to have

the preference of Farming it, &c.

Gold.

Silver.

Tin.

Lead.

Callamint.

#### 17 Sept. 7 Eliz.

A Patent to the same Persons of the Callamine stone, or Lapis Callaminaris, within the same places, and with like powers, for the better Composition of the mixed Metal called Latten, in reducing it to be soft and malleable for Wier, and mollifying of Iron and Steel, and drawing and forging them into Plates for Armour, in all our Realm of England and Wales, and within the English Pale in Ireland, power to dig, ut ante.

#### CHAP. VII.

The Abstract of the Indenture of Covenants between the Queen, and William Humfrey and Christopher Shutz, dat. 17 Sept. 7 Eliz. concerning the Mineral and Battery-works.

Irst, the Queen covenants, that no other Persons

shall dig of or for what is granted.

2. William Humfrey and Christopher Shutz covenant to pay unto the Queen a 10th. part of all Gold, Silver and Quicksilver.

3. And for Gold oar to pay for every 100 weight 8 pound

weight of fine Gold:

4. And for Silver the 20th. part, and the Queen to have the Preemption of the Oars, paying in every ounce of Gold 8 d, and in Silver 1 d. less then She can buy elsewhere, tobe paid within 30 days.

5. And for Tin, such portion as the Crown hath in De-

vonshire or Cornwall.

6. For Lead, such Customs and Profits as are used in other parts of the Realm.

7. Callamint, the 20th. part to the Crown, or the value thereof.

8. For

8. For every 100 weight of fine Copper during the first Copper. 6 years 2 s. or the 20th. part, at the election of the Crown; and after those fix years 2 s. 6 d. or the 15th. part, or the value thereof in Monie.

9. The Queen to have what She will of Copper for Her

Monie, giving half a years notice.

10. If not, then power to transport the rest, paying the Customs.

11. License to transport the Ewres, where no Wood is.

12. No former Grant to any other shall prejudice Hum-

frey's Grant.

13. The Copper and Tin to be brought to the place of Coinage to be marked, not above 1. Mile by Land or 12 by Water.

14. License to bring over Workmen, being no Enemies to the Crown, and they to be indenizon'd by the

Great Seal without charge.

15. Not above 8 Strangers to be Partners at one time, and not to have above one third part of the whole.

16. Humfrey and Shutz, &c. may bring over Victuals

and Tools without Custom.

17. The Queen to have power to resume, paying to Humfrey and Shutz, their Heirs or Assigns, such recompence as shall be adjudged by 6 Citizens, whereof 2 to be Aldermen.

18. If the Queen let them again, then Humfrey and

Shutz to have the Refusal.

#### CHAP. IX.

An Abstract of the first Incorporation of the Company of the Mineral and Battery=works, dated the 28th. of May, in the 10th. Year of Queen ELIZABETH.

He Queen, reciting former Letters Patents, dated the 17th. of September, in the 7th. Year of Her Reign, unto William Humfrey and Christopher Shutz, whereby She grants unto them to fearch, dig, and mine for the Callamine stone in all places of England, and within the English Pale in Ireland; and the onely use and commoditie thereof to have, and all forts of Battery wares, &c. and at their charge to erect Houses necessary, &c. with divers other Powers, &c. And also reciting other Letters Patents, dated the sime Day and Year; whereas before that time the Queen had given privilege to Cornelius Devoz for digging Allom and Copperice, &c. And reciting further the Grant to Thomas Thurland and Daniel Hough setter to dig for Oars of Gold, Silver, Copper and Quicksilver in the Counties of York, Lancaster, Cumberland, Westmerland Cornwall, Devon, Glouceft r, Worcefter, and in Wales, &c. with liberty to grant and affign Parts and Portions, &c. Ratifies and confirms all Immunities and Privileges to Will. Humfrey and Christopher Shutz, &c. And,

2. Dothgive and grant unto Sir Nicholas Bacon Knight, Thomas Ouke of Norfolk William Earl of Pembroke, Robert Earl of Lewester, William Lord Cobham, Sir William Cecill Knight, Sir Wa'ter Mildmay Knight, Sir Henry Sidney Knight, Sir Francis Jobson Knight, Sir William Garrat Knight; Rowland Hayward, John Tamworth, Peter Osburne, Thomas Cecill, Francis Agard, Thomas Fleetwood, William Roelerts, Henry Codenham, Robert Christmas, Roger Wetherall, William Patten, Christopher Chewt, Thomas Smith, William

Do.

Dodington, William Birde, George Barnes, William Humfrey, Christopher Shutz, Anthony Gammage, Richard Marten, Edmund Roberts, Francis Barty, Richard Handford, Edward Ca-Reline, To. Goodrich, To. Lovison, William Williams, Christopher Birkbeck, and Andiew Pulmer, that they by the Name of The Governours, Assistants, and Society of the Mineral and Battery: works, and their Successors, shall be Incorporate into a Body Politick to continue for ever.

3. Grants them a Common Seal, Libertie to purchase Privileges and Authorisies formerly granted to the said William Humfrey and Christopher Shutz, and to purchase Lands, Tenements, &c. by that Name, and to alien and sell the same, and be enabled to sue and be sued, &c. in all Courts, and before any Judge Spiritual or Temporal,

&c. in all matters touching their Society.

4. Liberty to chuse two Governours, two or more Deputies, and eight or more Assistants, Sir William Garrat and Rowland Hayward the two first Governours, John Tamworth and Peter Osburne the two first Deputies, and Thomas Flectwood, Henry Coddenbam, William Birde, George Barne, William Humfrey, Christopher Shutz, Anthony Gammage, and Richard Marten, the 8 first Affistants, untill the fielt Thursday in Decemb. afcer the Date, and from thence till new ones are chosen.

5. Power to assemble at their own pleasure, and to keep Courts there, and to elect their Governours, &c. and to make Rules and Ordinances for the well-govern-

ing the Affairs of the Society, &c.

6. Power to admit others to be Members, and to difmember, and to make Acts, and revoke the same upon occasion at pleasure; gives freedom to all the Society, Workmen, and Labourers, during the time of their Imloyment, not to be impannelled upon Juries; &c.

7. License to admit Aliens and Strangers as well as L. English, and to minister an Oath, and deliver Copies of

Admittances under their Common Seal.

8. To rule and govern according to the Laws &c. and

to do speedy justice in putting them in execution.

9. To purchase Lands, &c. not held In Capie, nor above the yearly value of 100 l.o ver and above all charges. Power to set Fines, Pains, &c. upon any Member, Officer, Workman or Labourer, for any matter relating to the said Society. And if any be disobedient, they are to punish them as the quality of the Fault requires at discretion, which they are not to result.

who is impowered to levy and gatherall Fines, &c. and to arrest both Body and Goods in case of resusal of paiment, in all places except Cities, &c. where the Mayor, &c. upon a Precept from the Society under their Seal, shall arrest and attach, &c. and the same to deliver over to the said Serjeant according to the tenour of the said Precept; and the said Mayor, &c. to be indemnified therefore.

11. Willing and commanding all Mayors, Sheriffs,

&c. to be aiding and affifting to the faid Society.

#### CHAP. X.

An Abstract of KING JAMES his Letters Patents, da= ted Jan. 28. in the second Year of His Reign, Incorporates for ever The Society of the City of London for the Mines Royal.

Recitals.

Eciting the Letters Patents granted to Tho. Thurland and Daniel Houghfetter, dated the 10th. day of October in the 6th. Year of Queen Eliabeth, and other Recitals.

2. Grants all Mines and Oars therein recited to William Earl of Pembroke, Robert Viscount Cranborns, Henry Lerd Windsor, Thomas Lord Burghley, Thomas Lord Gerraid, it John Popham Knight, Sir Edward Winter Knight, Sir Fran-

cis Popham Knight, Sir John Smith Knight, Sir Roger Owin Knight; Francis Nedhan, Arnold Oldiswor h, Chr stoph r Toldervy, William Gammage, Francis Beale, Otes Nicholsen, Richard Danford, Edward Barnes, Emanuel Demetrius, Abraham van Delden Emanuel Hechster, and Dan el Hechster; all Immunities formerly granted, and ratifies the same; and Incorporates them by the Name of The Governours, Asistants, and Society of the City of London of and for the Mines Royal; and by that Name to have Succession, and to continue for every standard and the same of the same of the same of the same to have Succession, and to continue for every standard and the same to have Succession, and to continue for every standard and the same to have succession, and to continue for every standard and the same to have succession, and to continue for every standard and the same to have succession, and to continue for every standard and the same to have succession.

3. To chuse one or two Governours, one or more Deputies, and six or more Assistants; and to have a Com-

mon Seal, and to purchase Lands, &c.

4 Robert Viscount Cranborne, Sir John Popham Knight, the first Governours; Sir John Smith and Arnold Oldif-worth Fsquire, the first Deputy-governours; Sir Roger Owen Knight, Francis Nedham, Christopher Toldervy, Wil-Gammage, Francis Beale, and Otes Nicholson Assistants, untill the first Monday in May 1605; and Annually that day to keep a general Court, and to elect Officers.

5. To keep Courts at such Places and Times as the Go-

vernours or Deputies shall think fit.

6. If any Officer elected die before the Year be expired,

the Major Part to chuse another in his place.

a virtal and in it

7. Power to keep Courts, to ordain and enact Statutes and Ordinances, to admit or expell such as are deemed unworthy to be Members of the Company; as also for the good Government of the Society.

8. All Persons to be admitted, before they be admitted to have a Quarter Part appointed for term of Life at

leaft."

9. A Gentleman, and a Freeholder of an Estate of Inheritance within certain of the 8 Counties, of 40 Marks per Annum, before Admission to have half a quarter part assigned, and to be admitted within 3 Years after the Date hereof.

no. An Oath to be administred to such as shall be admitted to be of the Company: and any Person admitted otherwise then is before expressed, not to be accounted a Member of the Company.

ter Part, and shall either alien, renounce, or otherwise by Act of Court be removed from the same, he shall no lon-

ger be held a Member of the Society.

the Society as they shall determine unworthy to remain of it: and their Dismembering being entered into the Book of the Acts of the said Company.

13. The Parties so removed not to be held Members

without new Admission.

Statutes to be made in due execution, as well to rule and govern every Member of this Corporation, as all the Ministers, Officers and Workmen, touching all Causes and Controverses concerning their Privileges.

15. Power to them or any Member to purchase Lands, not exceeding the yearly value of 100 l. nor held In Capi-

te, above all charges and reprises.

16. Power given by Fines, Forseitures or Imprisonment, to punish any Member, Officer or Workmen of the Company, for breach of any Rules or Acts to be made, or for any other Offence in the Affairs of the Society.

17. No person offending, and censured as aforesaid,

shall refuse to be ordered by this Society.

elsewhere, and him or them to be styled Serjeant or Serjeants of the Mines Royal, who have power to levy, receive and gather all Fines and Forfeitures aforesaid; and for default of paiment to arrest as well the Body as Goods of the Offender.

19. The Offender being in any City or Town Corporate, upon a Precept under their Common Seal to the Mayor or Sheriff, &c. they to arrest or attach the Body and

Goods

Goods of such Offender, and them to deliver to the said

Officer of the Company.

20. That the Mayor, Sheriff, or others, shall not be troubled for executing any Precept to them directed from the Company as aforesaid.

21. No Person to have Voice in Elections or other Af-

fairs, not having half a quarter of one 24th. Part.

be held of as great account as the Voices of two others, having but half quarter Part to be fany other having a greater Part then a quarter, to be effected of as great force as so many several other Perfons, having but an half quarter Part apiece.

23. All His Majesty's Officers, &c. to be aiding and

affifting to the said Governours.

#### CHAP. XI. Figure and Dall

The Abstract of the Letters Patents of the Mineral and Battery=works of the 22th of January, in the first Year of KING JAMES.

He King reciting the Letters Patents of Queen Elizabeth, dated the 17th. day of September in the 7th. Year of Her Reign, whereby She granted to William Humfrey and Christopher Shutz, their Heirs, &c. Liberty to dig, mine, and search for the Callamine stone within Her Kingdom of England, and within the English Pale in Ireland, together with the benefit of working thereof; with other Metals, with divers Immunities and Privileges, &c. for the making of all Wier and Batterywares, &c. and to erect and build Workhouses necessary.

2. And alforeciting other Letters Patents, dated the fame Day and Year, reciting by them, That whereas She had formerly granted Privileges to Cornelius Devoz for V mining

mining and digging within Her Realm of England for Allom and Copperice, and for divers other Oars, &c. And further reciting Her Grant to Thomas Thurland and Daniel Houghfetter, of Liberty to dig and search for all Oars of Gold, Silver, Copper and Quicksilver, within the Counties of York, Lancaster, Cumberland, Westmerland, Deven, Cornawall, Gloucester and Worcester, and in Wales, &c. And by the said last recited Letters Patents the Queen grants to William Humfrey and Christopher Shutz, sull power to dig within England and English Fale in Ireland, (except the said & Counties and Wales) for all manner of Oars and Metals simple and pure, or mixt and compound; and of Gold, Silver, Copper, Quicksilver, and for all other Treasures, &c. and to erect many other Immunities and Privileges, &c.

3. And whereas the said William Humfrey and Christopher Shutz have heretofore granted divers parts and portions of the said Immunities, Powers and Privileges, &c. and whereas the said William Humfrey and Christopher Shutz, and all or most of their Assigns are since dead. And

whereas the said Powers and Privileges, &c. are since come unto William Earl of Pembroke, Robert Lord Cecill, Sir Julius Casar, Sir James Pemberton, Sir William Bond, and Sir James Lancaster, Knights; John Osburne, Thomas Casar, Francis Barry sen. Arnold Oldisworth, Christopher Toldervy, William Gammage, Charles Chewt, Henry Tamworth, and William Bond sen. Esquires; Henry Palmer, Francis Barry jun. Richard Danford, George Browne, Gent. Richard Marten

jun Nathanael Marten , Richard Collins, and Alexander

4. Know ye therefore, &c. the King ratifies and confirms all the former Grants, Powers, Immunities, Privileges, Profits, &c. And also for the better Advancement of the said Works, grants to the last recited Persons, that they shall be for ever one Body Politick, and Corporate in it self in Deed and Name, by the Name of The Governours, Assistants, and Society of the City of London of and for the

the Mineral and Battery-works; to have Succession for ever,

and liberty to have a Common Seal.

5. License to purchase any parts and portions of the Immunities, Privileges and Profits, &c. and also to purchase Lands, Tenements, &c. by that Name; and so to alien and fell the same; and so to sue, implead, &c. and to be fued, impleaded, &c. in any our Courts, before any our Judges Spiritual or Temporal, &c. touching the Af-

fairs of the said Corporation.

6. Power to ordain two Governours, two or more Deputies, and 8 or more Affistants: and makes William Earl of Pembroke and Robert Lord Cecill the first Governours; Francis Barty sen. and Thomas Casar the first De. puties; and Arnold Oldisworth, Christopher Toldervy, Charles Chewt, William Bond Jen. Henry Palmer, Richard Dunford, Richard Martenjun. and Nathanael Marten, the first Assi= stants, untill the first Thursday in December next, &c. and from thence untill new ones shall be chosen.

2. Liberty to assemble and meet together for the keeping of Courts, and ordering their Affairs, and for Elections of Governours, &c. yearly, and for making Laws. Rules and Ordinances for the good Government of the Society, for the admitting of Members, and for the Difmembering; and the same Laws, &c. also to change or

revoke.

8. Indemnity to every Officer, Minister, Workman and Labourer from all injuries, &c. To admit Aliens and Strangers, and to administer an Oath, to give Copies of their Admittance under their Common Seal, and enter the same in their Register-book, and to do speedy justice to all.

9. Liberty to purchase Lands, &c. not holden of the King In Capite, or in Chief, not exceeding 100 l. per Ann.

over and above, &c.

10. Power to impose Fines, Penalties, Imprisonments, upon any Member, Officer, &c. for any Offence touching the said Society; and in case of Non-pay-

ment

ment to sue for the same in any Our Courts of Record.

11. Power to ordain one or more Officer or Officers. to be styled Serjeant of the City of London for the Mineral and Battery-works; who shall have power to receive and gather the Fines, &c. and for Non-paiment to arrest both Body and Goods, except in Cities, &c. where the Governours Precept is to be obeyed by the Mayor, &c. they are to be indemnified for acting therein. Mayors, Sheriffs, &c. are to be aiding and assisting to the faid Society.

12. Powers and Enlargements of some Defects in the former Patents concerning the Callamine stone, and all forts of Battery-wares, Gast work, and all forts of Wier. the digging and working of all forts of Oars, of Gold, Silver, Copper, Quicksilver, Tin and Lead; and for conveying of Water, and to erect Houses for the Melting, &c. not to dig in Orchards, &c. without License. And shall give reasonable satissaction for Damage as shall be agreed, or else to be referred; and if they disagree, then to

be determined at the Council Table.

13. All Persons (except the said Society and their Lefsees, &c.) prohibited to use the Callamine stone, or to attempt to dig for the same, or to melt or make into Wier, &c. or to dig for any Oars, or use any their Tools or In-

struments without Licence.

14. All Persons commanded not to hinder or disturb the Works of the said Society, or any their Workmen or Labourers, upon penalty of 100 l. for every Offence, the one Moyety to the King, the other to the Society; and fuch other punishment by Imprisonment, &c. as shall be

thought fit.

15. Power to the said Society and their Assigns, &c. to take up at reasonable wages and price Artificers and Workmen, Instruments, &c. and to buy Wood for . Coals, and Timber, onely for the finding and melting the said Callamin: stone, or the digging of or melting, &c.

of any the said Oars and Minerals, &c. or for conveying

of Waters : Except prout, &c.

16. Power at the Kings pleasure to search in other parts of Ireland without the English Pale, with like Profirs, &c.

17. And the faid Letters Patents made to Thomas Thur: land and Daniel Houghfetter, and the other made to Cornelius Devoz as aforesaid, shall remain and continue still in force. And that these Our Letters Patents shall remain

and continue inviolable, &c.

18. Provided that if the King shall at any time be minded to refume the Powers, &c. hereby granted, then he shall detain the same to His Own use, but not to let to any others; so as the Governours, &c. be first paid all their Charges, &c. as shall be adjudged by 6 persons Cirizens of London, whereof 2 to be Aldermen, &c. and upon their Certificate the Lord Treasurer to make present pay without further order.

19. And if the King after His resumption shall be minded to grant the same again, then the Society to be

preferred, &c.

20. A Precept to all Justices, Barons, &c. that the said Society, &c. shall have the benefit of these Presents from the faid 17th. of September in the 7th. Year of Queen Eli-Zabeth. And that they do not suffer any Action or Information against the said Society, &c. touching any thing herein contained.

#### CHAP. XII.

The Abstract of a Proclamation against Importation of Iron Wier, dated 7 Maii, An. 6. CAR. I.

Hereas Iron Wier is a Manufacture here, and by that Trade many thousands were maintained, &c.

2. And whereas Our English Wier is of better use then any Porein Wier, especially for making Cards for Wooll, &c. as by several Certificates, &c. And whereas sundry

Complaints have been made, &c. Therefore,

3. Well-weighing the danger and prejudice, and finding that fundry good Laws and Statutes have been formerly made against Importation thereof; By the advice of the Privy Council We do streightly charge and command all Persons from attempting to import into England or Ireland, &c. any Forein Wier or Cards made of Forein Wier, &c. upon pain of Forfeiture, &c.

4. Commanding that which shall be forseited be carried to the several Custom house where they are seised, without selling or compounding, &c. upon pain, &c.

5. Commanding all Officers attending our Customs to forbear to make Entries or Compositions for any the same Forein Wier, &c. but to seize the same as forfeited to

the Uses hereafter specified, &c.

6. And whereas there hath been one evil use in buying old Cards and trimming them up, and selling them for new ones to the prejudice of the Cloth trade; therefore commands all Persons to sorbear, upon pain of Forseizure &c.

. 7. And for encouragement to search and seize, a Moyety

to him that seizeth, the other Moyety to the King.

8. Commanding all Mayors, Sheriffs, &c. to be aiding and affifting; all Customers, Searchers, &c. herein. And

if

if any Mayor, Sheriff, &c. shall offend herein, to be proceeded against in the Star-Chamber by the Attorney General, &c.

#### CHAP. XIII.

An Abstract of a Proclamation against importing Latten Wier, dated Aug. 19. in the 14th. Year of KING CHARLES I.

1. Reciting (as in the Proclamation precedent against importing of Iron Wier, &c.) prohibits the importation of any Forein Latten Wier.

2. Commanding all persons to sorbear to import it after Michaelmas day in the said 14th. Year of K. Charles I.

upon pain of Forfeiture.

3. And that all which shall be forseited, shall be carried by the respective Officer (who shall seise the same) to the several Custom-houses, without selling or compounding upon pain, &c.

4. Commanding all Officers after the said day to seise what shall be imported, and not to make any Entry or Composition; the one Moyety to the King, the other to

the Officer who seiseth the same.

5. Commanding all May ors, Sheriffs, &c. to be aiding and affifting to all Customers, Searchers, &c. at all times after the said Michaelmas day, for the searching in any Ship, Cellar, Warehouse, &c.

CHAP.

#### CHAP. XIV.

An Abstract of the Reasons for continuing the Brass Manufacture in this Kingdom given in about five Years since to the House of Commons by the Brass Manufactors.

Hat England is in a capacity to be the Staple of Brass Manufactury for it self and Forein parts, by reason of the inexhaustible plenty of the Callamine

Stone, &c.

2. That Parlements have always encouraged Manufa-Guries by means of great Impositions upon Forein Wares, whereby the Staple may be here for supplying Forein parts, especially of Pins; which may also be done with Latien Wier, and would tend to great security and advantage, &c.

3. Seeing the Staple of Pins is now here, and not having Latten Wier, upon Embargo's or Wars beyond Sea,

they may for want of Wier lose their Trade, &c.

4. To prevent which His late Majesty caused a Prohibition of all Forein Latten Wier, to continue the Brass work here, which was diverted by reason of the late Trou-

bles, &c.

ed, but rather increased, a Prohibition is not so much desired as a larger Imposition upon it, proportionable or more to that of the King of Swedens upon Copper, whereby we shall be enabled to work as cheap, &c.

6. The Swedes have fince entered into a Corporation, with a resolution for some time to be Losers by their Goods, intentionally to subvert the Manusacture in England, endeavouring to inveigle away our chief Work-

men, &c.

9. These Brass works being once down here, five thou-

fand pounds will not set them up again.

8 li. per 100. but since, the Swedes have brought it to 5 li. 5. s. per 100. but upon the decrease of these Works they begin to raise the price, and so in time we shall be enforced to take it at their own rates.

11. The Complaint of the many Towns in Somerfets who

live upon it, shew the great concernment of it.

12. These works being brought to perfection, will cause the exportation to be as considerable to the Kings revenue, as the Importation now is.

13. The continuing of these Works in England will occasion plentie of rough Copper to be brought in, and make it the Staple in time, of Copper and brass, we har

ving the means so plentifully here.

him, as the Crown of Sweden gives their subjects, &c. We in England not being able to work upon equal terms, which by a Medium of raising the duty here upon the Forein Latten Wier, may easily be remedied, &c. This Kingdom being so fit for it by reason of the Callamint stone, which if we use not our selves, must either lie wast, or be transported: and in these works many thousand families will be emploied and maintained, and in time may be as sit to be exported by us, as 'tis now imported when and how they please, besides the consideration of the great importance, for the desence and strength of this Island, &c.

#### CHAP. XII.

The Abstract of an Act against Importing Forein Wooll, Cards, Card Wier, or Iron Wier, Anno 14. CAROLI II. Regis.

Eciting, that whereas by several Acts of Parlement made in the 3d. Year of Edwerd IV. and in the 39th. of Queen Elizabeth, and several former Statutes, no Cards for Wooll nor Iron Thred or White Wier should be imported, by reason many Families of poor people by that Manufacture were maintained; Notwithstanding contrary to the faid Statutes many Cards and much Wier have been brought in, &c. Be it therefore Enacted, that no Forein Wooll Cards or Card Wier be imported, nor any old Wier put upon new Boards to be fold, upon the Ptnalties following, (viz.) upon Forfeiture of the same, or the Value thereof, the one Moyety to the King, and the other to fuch person as shall first seise or sue for the same, &cc. Provided this Act extend not to hinder any one of Wooll Cards to cause them to be mended for their own use, or to sell or transport them being old and over-

#### CHAP. XVI.

The second Opinion of other eminent Lawyers concerning Mines Royal.

Lthough the Gold or Silver contained in the base Metal of a Mine in the Lands of a Subject be of less Value then the base Metal; yet if the Gold or Silver do countervail the charge of the Resining it, or be of more worth then the base Metal spent in Resining it,

#### THIS IS A MINE ROYAL:

and as well the base Metal, as the Gold and Silver in it, belong to the Prerogative of the Crown.

16 CAR. I. 9 Feb. 1640. To. White John Glanvill 70. Glover E Harbert 7a. Haward Ralph Whitfield 26 Feb. Oli. St. Johns Eus. Andrews 25 Feb. 1640. Ed. Prideaux John Herne John Maynard Christ. Fulwood Tho. Culpeper Harb. Grimston 9 27 July 1641. Edw. Baghaw

#### CHAP. XVII.

Rules Agreed upon by the Societies of the Mines Royal, and Mineral Battery-works, concerning the letting of Leafes, to Owners, Discoverers, or Undertakers, of Juch Mines as bold Gold or Silver, and the Manner and Conditions of the Leafes.

Royal in his ground, he shall have as many Leases as he pleaseth, he covenanting for every Lease, ac-

cording to Conditions underwritten.

2. It any Farmer or Possessor do discover a Mine Royal in the Land which he useth, which was never wrought, he shall have the Moietie of the profits, and the Proprietor the other Moietie, if they will jointly work, and in that case a Lease shall be made to both of them; but if the Proprietor resuse to joyn in such Lease, then the Lease to be to the Discoverer, he Covenanting as solloweth; But if both shall resuse, or forbear to work through disability or unskilfulness, then the Corporation will reward the Discoverer, according to the Nature of the Mine, whether he be Proprietor or otherwise.

3. If any Farmer or Possessor discover a Mine Royal which hath been wrought otherwise then as a Mine Royal, he shall be proceeded with according to the second

Rule.

4. If any other person, being neither Owner, Possessor, nor Farmer, shall discover a Mine Royal in another mans ground, he shall be proceeded with according to the second Rule.

5. A Discoverer who shall be capable of a Lease in other Mens grounds, is such a person as shall be the first, who without fraud or Circumvention shall inform the Corporation of it.

6. If

6. If any person shall undertake to work a Mine Royal, that hath been long deserted by reason of water, or or ther causes hindring the work, the Owner resusing to work or joyne in the same, such Undertaker shall have all reasonable encouragement from the Corporation, by Lease or otherwise.

7: The Term to be granted in any Lease not to ex-

ceed the Term of fourty and one years.

8. The Lessee shall have power to dig, &c. in as full manner as is granted by the Charter, Provided he dig not under any Castles, Houses, Gardens, or Orchards,

without the Proprietors consent.

9. The Grounds and Mines to be Leased, shall not exceed one mile in Diameter, which is to be measured from such a place as the Lessee shall fix upon; and is to be described by the Town, Village, or Hamlet where it lieth, or the scituation or peculiar name, or distance from such remarkable place or places, as Churches, &c. which description is to be Certified by some Justices of the Peace, or the Minister of the Parish, or both, or by any of the sworn Officers of the Corporation, or by such other way as the Corporation shall particularly direct in that case; and in this allotment, care to be taken that the said mile distancer do not extend or intrench upon any other Grant from the Corporation, in which case the Corporation will not justishe the Lessees Incroachments, but limit the Lease accordinglys

mans Propriety without the limit of that mile, then upon that Lessees taking of a new Lease, consideration shall be had of the Proprietor, as the Company shall think sit, it being not reasonable that he be admitted to

the entire advantage of the second Rule.

11. That the Fine to be paid upon every Lease granted,

be at least equal to a years rent reserved.

## HEADS of the COVENANTS to be Contained in those Leases.

1. For the Lessees, paying the reserved rent at the time

and place appointed by two equal portions.

2. That the Lessee shall covenant to discharge all dues to the King, and save the Company harmless, and to give an Account to the Companie when required, what metal he vendeth inward and outward, and how the Kings dues are answered.

3. Not to dig under any Castles, Houses, Gardens, &c.

4. The Lessee to Covenant immediatelie to set in hand, proceed and continue the effectual working of the Mines and Mineral work demised.

5. A Proviso that the Lesseemay surrender his Lease, after six months advertisement to the Company, paying

all Arrears.

6. Damages for breaking ground, to be referred to six

indifferent persons according to the Patent.

7. That every Lessee shall bring in all his Gold and Silver into the Kings Mint, or otherwise forfeit the same,

or the value thereof.

8. The Lessee to extract the Gold and Silver out of the base metal, as long as it conteins the much of both, or either of them, as will countervail the charge of extracting, and the loss of the base mettal, or else shall forfeit his Lease.

9. The Lesse not to assign his Lease, or make any Lease out of it, without Licence from the Corporation.

10. The Lessee at the end of the Term, or other determination, to deliver quiet possession without prejudice to the Mine.

11. The Corporation to Covenant for quiet enjoyment against them, and all others claiming under them.

#### CHAP. XVIII.

Extracts out of CAMBDENS BRITANNIA concerning the Tin Mines in Cornwall.

The Inland Parts have rich and plenteous Mines of Tim.

Tin; for there is digged out of them wonderful store of Tin, yielding exceeding much profit and commodity; whereof are made Houshold Pewter Vessels, which are used throughout many parts of Europe in service of the Table, and for their glittering Brightness compared unto Silver Plate. The Inhabitants do discover these Mines by certain Tin stones lying on the face of the Ground, which they call SHADD, being somewhat smooth and round. Of these Mines or Tin Works there are two kinds; the one they call Lode Works, the other Steams Works: this lieth in lower Grounds, when by Trenching they follow the Veins of Tin, and turn aside now and then the Streams of Water coming in their way: that other is in higher places, whenas upon the Hills they dig very deep Pits, which they call Shafts, and do undermine in working: both ways there is seen wonderful Wit and Skill, as well in dreining Waters aside, and reducing them into one Stream; as also in the underbuilding pinning, and propping up their Pits. To pass over with filence their devises of Breaking, Stamping, Drying, Crusing, Washing, Melting, and Fining the Metal, then which there cannot be more Cunning shewed. There are also two forts of Tin; Black Tin, which is Tin Oar broken and washed, but not yet founded into Metal, and White Tin, which is moulten into Metal, and that is either fost Tin, which is best Merchantable, or hard Tin, which is less Merchantable.

Ro.

That the Ancient Britains practifed thefe Tyn-works, for Pliny reports, That the Britans fetched Tyn out of the island Icia in Wicker boats covered, and stickt about with Lether:) And Diodorus Siculus writes, that the Bittims who inhabited these parts digged Tyn out of stonie ground, and at a Low-water carried the same in Caris to certain Islands adjoining, from whence Merchants transported it by ships into Gaule, and from thence conveied the same upon horses within 30 daies unto the Spring head of the River Eridanus, or else to the City Narbone, as it were to a Mart. Ethicus also insinuateth the very same, and saith, that he delivered Rules and Precepts to these Tyn workers. But it seems, that the English Saxons neglected it altogether. After the coming in of the Normans, the Earles of Cornwall gathered great riches out of these Mines, especiallie Richard, brother to King Hen. 3. and no marvel, fince in those daies Enrope had Tynn from no other place, for the Incursions of the Moors had stopped up the Tyn Mines of Spain; And as for the Tyn veins in Germany, which are in Mifni. and Bohemia, they were not as yet known, or not dis. covered before the year after Christs Nativitie 1240. for then, (as a Writer of that Agerecordeth) was Tyn Metz tal found in Germany, by a certain Cornish-man driven out of his Native soile, to the great loss and hindrance of Richard Earl of Cornwall. This Richard began to make Ordinances for these Tyn-works; and afterwards Edmund his ton granted a Charter, and certain Liberties, and withal prescribed certain Laws concerning the same, which he ratified or strengthned under his seale, and imposeda Tribute or Rent upon Tyn to be answered to the Earles.

The Comof Tynimrs.

These Liberties, Priviledges and Laws, King Edw. 3. mo,-wealth did afterwards confirm and augment, the whole Commonwealth of those Tynners and Workmen, as it were, in one bodie, he divided into four quarters, which from the places they call Foymore, Blackmore, Iremarniyle, and Pen-

Penwith; over them all He ordained a Warden called Lord Warden of Warden of the Stannaries of Stannum that is Tin, who are to ries. give judgment as wel according to equity and conscience as Law, and appointed to every quarter their Stewards, who once every three weeks (every one in his several Quar= ter) ministers justice in Causes Personal between Tinner and Tinner, and between Tinner and Foreiner, except in Causes of Land, Life or Member, from whence there lieth an Appeal to the Lord Warden, from him to the Duke, and from him to the King in matters of moment. There are by the Warden General Parlements or several Assemblies summoned, whereunto Jurats are sent out of every Stannary, whose Constitutions do bind them. As for those who deal with Tin, they are of four forts; the Owners of the Soil, the Adventurers, the Merchants or Regrators, and the Labourers called the Spadyards, their Spade.) The Kings of England and Dukes of Cornwall in their times have referved to themselves a Preemption of Tin, as well in regard of the Propriety, as being Chief Lords or Proprietaries, as of their total Prerogarive. lest the Tribute of Rent imposed should be imbezelled, and the Dukes of Cornwall defrauded, unto whom by the old Custom for every thousand pounds weight of In there is paid forty Shillings. It is by a Law provided, that all the Tin which is cast and wrought, be brought to one of the said four appointed Towns, where twice in the Year it is weighed, and figned with a Stamp (they call it Coinage) and the faid Impost accordingly paid. Neither is it lawful for any man before that to fell or send it abroad, under Forseiture of their Tin. And not onely Tin here is found, but also therewith Gold, and Silver, yea and Diamonds Shaped and pointed Angle-wayes, Cornish smoothed also by Nature her self, whereof some are as Diamonds. big as Walnuts, and inferiour to the Orient Diamonds

onely in blackness and hardness. Sir John Dodderich his History of the ancient and mo-

dern Establishment of the Dutchy of Cornwall, &c. is al-

moft

most verbatim with what Cambden hath writ concerning Tin; and both of them from Carews Survey of Cornwall. But all the Laws concerning Tin are fully digested in the Lord Cokes 12th. Report concerning the Case of the Stanaries.

#### CHAP. XIX.

Concerning the Laws of the Lead Mines in Derbyshire and Mendip in Sometershire

From the Bundle of the Exchequer, and the Inquisition of the Year of the Reign of King. ED war D the First. 16.

Derby.

Dward by the Grace of God King of England, Lord of Ireland, and Duke of Aquitain, to the Sheriff of the County of Derby, Greeting: Know ye that We have affigued Our Faithful and Well-beloved Reynold of the Ley and William of Memill, to inquire by the Oaths of good and lawful men of your County, by the which the truth may best be known, of the Liberty which our Miners do claim to have in those parts, and which they have hitherto used to have, and by what means, and howard from what time, and by what War. sant: And therefore We do command thee, that a certain Day and Place which the faid Reynold and William shall appoint thee, thou shalt cause to come before them fo many and such good and lawful Men of thy Bailiwick, by the which the truth may there the best be known in the premisses by the Inquirie; and that thou have there the Writ. Witness Our Well-beloved Cousin Edmond Earl of Cornwall at Westminster the 28th, day of April, in the Year of Our Reign the 18th. 

1 2

By William of Hambleton, and at the instance of Hugh of Cresing ham the Day is appointed at Ashbourne, upon Saturday next after the Feast of the Holie Trinitie.

An Inquisition taken at Ashbourneupon Saturday next after the Holy Trinity, in the Year of the Reign of EDWARD the First the 16. before Reynold of the Ley and William of Meignil; of the Liberties which the Miners of the Said Sovereign Lord the King, in the Peake, do claim to have bitherto used to have in the fe part, by what means, and how, and from what time, and by what Warrant.

Tho. Foliamo Will. Hawley Ralph Cotterill William of Longsden Fobil of Tearture Ciement of Ford

William of Bradlaw Peter of Rowland Ri bud of Longsden Jur William son of the Smith of Heary Foliambic (Bradwall John of Longsden

1. Who say upon their Oaths, that in the beginning Of a new when the Miners did come to the Field feeking for a Mine, and finding a Mine, they do come to the Bailiff, which is called Burghmaster, and did desite (if it were a new Field) that they might have two Meers of Ground that is to fay, one for the finding thereof, and the other by the Miners Fine, viz. paying a mere Dish of his first Oar. \* 10 HARE

2. And the Miners desired also in an old Work of right Anold to be measured to the said Miners, every Meer to contain length of a four Measures, and the hole of the Mine to be 7 feet wide Meer.

new Field.

The King

paid.

3. And everie Measure shall be of 24 feet, and the King The length shall have the third Meer next the Finder, and the other of the Meafure, the two Meers shall be delivered to the Workman Finder of King to the new Mine by the Burghmasterbave a 3d. Meer in a

4. And in an old Field everie Workman demanding fuch Work, one Meer in the Field next our Soveraign

Lord the King.

5. And the King shall have the 13th. Dish or Measure

of Oar, which is called The Lot. is to have the 13th.

6. And this hath been used, and for this our Sovereign Diff f r lot. Lord the King shall find unto the Miners free ingress cause Lotis and egress into and from their Mines, to carrie and bear

their Oar unto the Kings High way.

7. And the Jurie do fay, that they are used for coming The King in Mines, that our Soveraign Lord the King shall have Shall have Our, giving the Buying of their Oar before all others, giving as anoas much as ther will and the sale another.

An Exception.

8. And if the Miners have received any Monie of any other man before hand for his Oar, then the Miners shall pay their Debts without any let of Burghmafter, fo that this be without fraud or deceit, or else the King shall have the Oar before all others.

Miners. may lamfuldy fell their Meer at pleafure.

9. And the Jusie say further upon their Oaths, that it is and shall be lawful to the Miners to sell, give and assign his Grove or Meer of ground, or any part thereof, without the License of the King or Burgi master.

An Exception.

10. And this hath been used time out of memorie of man in all the Territories and Liberties of the High Peak unto this time, save in a certain place there called Man Dale, in which place all Buyers of Oar are prohibited to buy Oar by the space of 4 Years last past by the Burgh-

Course of master to be kept every 3 Weeks.

maiter.

11. And for what cause the Miners may maintain their the Burgh- Right and Customs above the said Jurie do say, that the ancient Custom of the Mine is, that the Pleas or Courts of the Burghmaster ought of right to be kept and holden Yearlie upon the Mines from 3 Weeks to 3 Weeks.

12.And

And the Jurie say upon their Oaths, that if any Miner Coroner of be stain by any missfortune, that such Miner be buried not to view (without the view of the Coroners of the said Countie) the Bidy of by the view of Miners.

And if any person or persons be convicted of any small Tenth Fine Trespass, he ought to pay for his Americament 2 d. and for small that to be the same day paid, or else to double the same

Amercement till it come to 5 s. 4 d.

If any bloud be shed upon the Mine, the Author shall Every pay 5 s.4 d. the same day, or else shall double the same eve-Bloudhed ry day till it come to 100 s.

And if any Miner do any Trespass under the ground to his Fellow, he shall pay for his Amercement 5 s. 4d. and

satisfie his Fellow the full value of his Trespass.

## FINIS.

## In Nomine Dei, Amen.

First time that the New Mine was sound, the Merchant of a new and the Miners chose them a Burghmaster, for to deliver Fields unto the Finder of the Mine two Meers, and the Lord of the Field a Meer near to the said two Meers on the one of the Field partie; or else half a Meer on the one side of the said to have a Meer, and another half on the other side, at his own election: and after that the Burghmaster shall deliver to the Miners Meers to work after the Law of the Mine.

## THE LIBERTIES AND

## CUSTOMS.

And a Meer shall contain in length 10 wands and 7 A Meer of feet, that is to say 87 feet there, alway as the Mine goeth Ground which in between two Coals, and the Miners shall have their Meers length. to them and their Heirs for ever : but if they be forfeit= ed by the Law of the Mine to the Lord, their Wives wives to shall have Dowers in the said Meers: but if they be have Dow-

ers in forfeit, they are as aforesaid. Meers.

And the Miners shall work their Meers duly, and shall How the Work to be chuse their Stool on that one part there as he may find Mine between two Walls, in the natural way till he come followed. to the Meer Stake, and then his Neighbours next him shall chuse the Stool in the same manner, and so the Stool For letting shall be closed from Meer to Meer, but if it be letted by by Water.

The Burghmaster is to foore the Spindle of the Stow's

Where it is

not rightly

mrought.

Water.

And then the Burghmaster shall see that the Mine be wrought duly, and where he findeth a Meer unwrought, he shall score on the Spindle one score, and so from week to week he shall visit the Field, and see that the Mines be wrought.

And if he find any Meer standing unwrought 3 weeks together, he shall score three scores on the Spindle, and deliver it to him that will work it as the Law will; but if it be borrowed and replevied, as the Law of the Mine

will at the 3 weeks end.

Concern.ng

And then the Lords and the Miners shall ordain them Measures. a conveniable Measure by which the Lord shall receive

his Lot, and the Miners shall sell their Mine.

And the Miner abiding upon his Meer shall have delivered to him by his Burghmaster a sufficient place for his Lodge, and for his Cottage, with sufficient House-boot and Hay boot, and all manner of Timber for their Groves delivered by the Lords, or by his Fosters (if they have

have sufficient within their Lordships) else the Miners shall buy them at their own proper cost in other Lordships, and then the Lord shall take Lot, and then it shall be lawful for them to carrie their Mine whitherloever them lift, and burn it, and do with it what them likes best, without disturbance of the Lord, or any of his Of= ficers.

And the Miners and Merchants of the said Mine Miner and shall be quit of all Damages and all other Customs, Merchant as far as the Lordship lasteth, and in all places as the

Lord may spend Four Pence by the Year.

And the Miners shall have for their Beasts Pasturing Miners to with the Lords Beafts in his Wastes, except his fenced have Pa-Parks, Medows, and fowen Fields; and then no Mini. fure in the Lords ster of the Lords shall pin them nor distrain them for no waste. Article of the Mine within the Franchise of the Mine, but Not to onely the Burghmaster and the Lord.

Also the Stewards shall hold Yearly on the Mines at Miners. their own wills Courts, and two Great Courts every Courts to be Year; and if any Miner or other person be Attaint for kept. stealing of Barmine, first he shall be amerced in it 5 s. 4 d. the which 4 d. the Burghmaster shall have; and if he be Attainted again, the Miner shall be amerced in 10 s. 8 d. the which 8 d. the Burghmaster shall have; and if he be Attainted the third time for stealing of Mine, he shall be taken and stricken through the Right Hand in the Palm with a Knife up to the Heft into the Stow, and there he shall stand till he be dead, or else cut himself loose, and then he shall forswear the Franchise of the Mine.

And if any man be taken by occasion of any Article that office of the belongeth to the Mine, he shall abide in the keeping of Steward the Burghmaster; and if he will be Mainprised, the Pain Felony in shall be 100 l. to be brought again before the Steward at the Mine. the next Court of the Mine; and if he that is Mainprised be Attainted of Felonie in the Court, the Steward shall do to him as the Law will upon the same place, if he will put him upon the Miners.

And

Aline.

Of Lands and Chat-

lons and

Walley V

Fugitives.

And each Trespass of Oaths or Bloud shall be amerced A Bload

Bed 5 5.4d at 5 5. 4 d. which 4 d. the Burghmaster thall have.

And every other Trespals done upon the Minerie shall Fines for Trespels in be fined at 2 d. and that shall be paid to the Burghmaster the first day of Affirmment, or else the second it shall be Min.s. doubled, and so from day to day till it come to 5 s. 4 d. and then the Burghmafter shall have the 4 d. and the Lord the 55.

And the Miners and Merchants shall have Weights, Measures, their Lead and Measure for their Oar, at all times when they will, and the Ministers to be ready at all times upon

warning without let of the Lord or of his Officers.

And if it happen that the Miners or any other be dead fter onely to in the Grove or elsewhere, no Escheator or Commoner, do with any nor no other Officer of the Lorde, shall meddle of Lands, Goods nor Chattels of him that is flain or dead by any Nain in the misfortune, but onely the Burghmaster of the Mine.

And if any Felonie be done within the Franchise by Manslaughter, or Fugitive of Felonie, or Theft, or Robberie, the Lands and Chattels of Felons and Fugitives shall tels, of Fe-

beforfeited, (if they have no better grace.)

And if any Miner of his own underbeit his Neighbours Meer, that then he shall fill his Underbeitings with such as he got out, be it pure Mine, or Bergh, or Bous, and be amerced at 5 s. 4 d. which 4 d. the Burghmaster shall have.

And if any Miner or other take Costage of a Merchant, Liberty for Miners in and may not find Mine to that Merchant, the which let & cofts. Merchant will make no more Cost to find Oar in the same place, and after he laboureth, and findeth Mine to the profit of another Merchant after such labour shall come, and if there be two or three, the said sirst Mer= chant that first made his Costage shall have the 3d. Stone till he hath received his Costages, and the other Merchant shall have the two parts, for that the Mine was found at his Costages.

A'so the Minerand Merchant shall have free entrie and Which due issue by all the Lordship to carry their Mine, and carry for Copr. it whither they list, we hout let of the Lord or any of his Officers: But they shall give to the King for every Lord 4 d for entrie and issue by his Lordship, and that is called Cpu. and if any Miner or Merchant died by misadven-Burghmature under the hath, or be slain by hance medley, the ster Coroner Burghmatter shall see his bodie as Coroner, and let his for the Mine. bodie be buried without any other Coroner.

And the Miners shall have for their lot and Copr. soffi-Grove Timcient Timber for their Work (without any Penie giving) ber.

of the next Founder within the Kings Lordship.

A fo hay shall have Water to wash their Mine with= Water.

out any Letor the faid Lot and Copr.

any other man will give them, he shall have their Mine empion of before all other men; and is he will not they shall sell the Miners their Mine where they will to their most profit, without impeachment of disturbance of the Lord, or any of his Ministers. In witness whereof, &c.

The fibeen the Laws and Customs of the Mine used in the highest seak, and in all other places through E gland and Wases, for the which to be had the wise Miners sued to our Lord the King that He would confirm them by His Charter under His Great Scalin way of Chartie.

And so he Profir, for a fruch as the a foresaid Miners be at a 1 times in perit of their Dea h, and that they have nothing in certain, but that which God

o. his Grace will fend them.

## FINIS.

WILLIAM DEBANCKE.

CUR.

Cc

# CUR. MAGNA BARMOT.

TENT. APUD WWKSWORTH CORAM

FRANCISCO Com. Salop. 20 die Septembris,

Anno Regni Edward I VI. &c. Tertio.

Inquisitio Magna pro Domino Rege Miner. infra-

Wapentag. prædict. per Sacramen.

Furars. Furors. William Bennitt Nicholas Hides Tho. Steepld Robert Cotten Tho. Wood Edri. Robotham James Hall Hen. Storer Roger Gell William Leigh John Storer John Spencer Hen. Spencer Tho. Bramwall Ralph Heughton John Gratton Oliver Stonne John Somers Roger Malle Rich. Wighley Edw. Willie Tho. Cockshotte Will Shape Tho. Woodivis

We do present and set down Pains for the Miners, as followeth.

Measure.

1. We will that the Lord of the Field shall make an able Dish from this day forth between the Merchant buyer and the seller, and against every good time, as Christmas and Whitsontide two able Dishes, upon pain of every time wanting if it be called for, to forseit for every time 3 s. 4 d. to the King.

2. That

2. That the Lord of the Field, Deputie, and the Burgh- For Ground master or his Deputie, shall go every week once or twice wrought over the Fields, and where they find any Ground wrought wrongfully by any man, contrary to the right and custom of the Mine, then they shall take them up untill fuch time as the Law of the Barmote hath determinedit, or else the Burghmaster or his Deputie (ac= cording to the old custom) shall put 4 or 6 honest men among the 24, that they may have the hearing of the matter between the Parties, for to set an Order for the same Ground so wrought wrongfully, that the Field be not

And whofoever disobeyeth this Article, to forfeit for every time so doing 3 s. 4 d. or else to go to the Stocks if he be a light person, and the 24 Miners shall aid the Officers in so doing, according to the

old custom of the Mine.

3. Also that the Burghmaster or his Deputie shall able us the next way to the Kings High-way to the water with Oar, if any man stop us, according to the custom of the

Mine.

4. Also if there be any poor man that hath any Oar under a Load to meet, and give the Burghmaster warning according to the custom of the Mine, and cannot have the Dish, then it shall be lawful for such poor men to take two honest Neighbours, and deliver his Oar to whom it pleaseth him, paying the Church and the King their Duties.

5. Also if the Burghmaster attach any Oar (or his De- Oar-steatputie) which is stollen, he shall attach the Seller thereof, that he might have the Law of the Mine, according to

the Charter.

6. Also if there be any man that maketh any Title to Trials for any mans Ground contrary to Right, and it be tried by Grounds in the Law, he that is cast shall pay two Shillings for the twelve mens Dinners; and if he will not pay it, then the Burghmaster shall take so much Oar of him as cometh

me h to two Shillings or else some other Distress if he be

Not to be amerced.

7. Also that no Miner shall be amerced by the Burh-

master without lawful Warning. vo ;

8. That no man shall mete without the Kings Dish; for if he do, and be so taken, if it be above a Lead of Oar, the Lo d of the Field shall have it; and if it be under a Load, the Burghmaster shall have it, if it be taken metir g besides the Dish, if he do not call for the Kings accordingly.

Concerning
Our debt.

Obligation of the Barmete Court; nor no Officer shall serve a Writ nor Warrant upon any Mine; when he is at his Work upon the Mine, nor when the Miner cometh to the great Leets of the Barmote, but the Burghmaster or his Deputies; and it any man sue for Oar Debt forth of the Barmote Court, he shall lose the Debt, and pay the Costs.

How the Courts ought to be k.pt.

10. Also the Burghmaster sha'l keep two great Courts every Year, and it need be orr quire, every third Week

a Court, upon pain of 3 s. 4d.

If a new Field be found.

Why Lot

paid.

new Rake or Vein, the first Find r shall have two Meers, and the next Meer after the Burghmaster shall have for the King, according to the old Custom of the Mine, and eve y taker after but one Mer; and so the Field to be occupied according to the Right and Custom.

Wood of the Kings Woods to stow and timber their Groves under the Earth and above; and therefore the y pay lot to the King, for which they ought to have sufficient

off the Kings Grounds that is next thereto.

13. Also if there be any man slain or murthered upon the Mine upon any Grove, neither Escheator or Coroner, nor any other Officer, shall meddle therewith, but onely the Burghmaster.

14. Also

14. Also all new Grounds, as Crosses and Holes that How long be not stowed nor yoked lawfully, from the first day of Holes shall July, or within three weeks and a day next after ensuing, hold Posses that then it shall be lawful for any man to take them and from work them lawfully. And no Croffes nor Holes shall stand no longer then a man may go home and fetch his Tools to work with, and Timber to flow with; and the furthest Day so standing to be a days, and after the ad. day any Cross or Hole shall be lawful for any man to work them lawfully.

15. Also we say, that the Burghmaster shall not mea. A Ground Sure any mans Ground untill such time as the Mine hath measured by the Oar gotten within the same Ground to free it with, gottem.

else it shall not be measured.

16. Also that no Merchant buyer of Oar shall touch The buyers the Kings Dish, nor puthis Hands therein to make his the Dish. Measure; but the Burghmaster or his Deputie shall be indisferent between the Merchant buyer of the Oar and the feller.

17. Also that no man that is a Workman, that doth Her Imposi. work his Ground truly, there shall no man come to claim to mork; Claihis Ground, and take him up to stop the Field: but the mer take his first Workman shall work, and the Claimer take the Law, Law, and the Burghmafter shall do him the Law truly.

18. Also no Barmer, nor any other Deputie, shall keep Gage and no Counterfeit Dish nor Gages in their Cows nor Houn Dishes being fes; but every man shall buy by the Kings Dish, and no kept. other Dish used, upon pain for every other Dish or Gage so known or taken, to forfeit for every time 6 s. 8 d. and the seller to forfeit his Oar.

19. And if any Gentleman or other man have any Touching Ground lying in the Mine called The Kings Field of the Gentlement and other Mine, they shall keep them lawfully with Stows and mens Groves Timber openly in all mens fight between this and Micha-unwrought. elmas next to come, or else it shall be lawful for any man to take and work them for their own.

Against

20. Also we lay a Pain, that no person shall at any time ance souch- from henceforth go to any Gentleman or other man, for ing Groves to give or sell any Groves or Grounds in variance for in variance. Maintainance, and every person so doing to lose his said Grove or Grounds, and the taker of any fuch Groves in variance as aforesaid, to sorfeit 10 l. to the King.

Measured by Counterfeit Measures.

21. Also if any person or persons from hencesorth do make any Gage, or counterfeit the Kings Measure to mete Oar with, if it be a Lord, every such person or per= fons so taken shall forfeit every time to l. and his Oar to the King.

#### BARMOT. MAGNA CUR.

Dom. REGIS & Dom. REGINE, TENT: APUD WRICKSWORTH 3 Maii, Annis Regni PHILIPPI & MARIX, Dei Gratia Regis & Reginæ Angliæ, Hispanniæ, Franciæ, &c. tertio & quarto.

Inquisitio Magna pro Domino Rege & Domina Regina pro Niner. infra Wapentag. prædict. fecund. confactud. ibidem ufitat: per Sacramen.

> Furors. Rud. Cadwan Hen. Smith Rich. Winfield Hen. Spencer Will. Sands Rich. Hilton Rob. Alleynsea Hen. Mycock John Steeple Will. Ballance Tho. Bennet Thomas

Furors. John Wright Mich. K ight Holm Laurence Supper Roger Marlee Roger Tippinge. Rich. Wigley John Norman Will. Robotham Tho. Wood Tho. Needham John Pickocke Tho. Jones

1. We will the Lord of the Field shall make for us Lord of the and all other Miners an able Dish from this time forth, provide able between the Merchant buyer and the Merchant seller of Diffes. Oar, and against everie Good time, as Christmass, Easter, and Whitsontide two able Dishes, if need shall require, if they be called for, upon pain for everie time not so doing to forfeit 2 s. 4 d.

2. Also we tax a Pain, that whereas everie man that Not to die hatha Washing Trough of his own by the custom of the or showel Mine, ought to have the space of 7 feet about the said within 7 Washing Trough, that if any person shall dig, delve, or mans Wash. shovel nigh upon the said Trough within the said space, ing Trough

Thall forfeit so oft as they shall so do 4 d.

3. Also we lay a Pain, that no person or persons shall AP in purchase any Oar in any mans Ground, (but in their touching Purchasors. own onely except) that the Owners be upon the Ground, upon pain to forfeit the Oar to the Owners of every such Ground, and 6 d. to the King and Queen so oft as they shall be taken therewith.

4. Also that no person shalldig, delve, or shovel at or Not to dig, about any mans being place, upon pain to forfeit for or any mans every time 12 d. being place.

5. Also that no Purchasors shall let or stop any Miners Miners not from any Wash trough at any time, upon pain for every stopped from Offence to forfeit 12 d.

Washtroughs.

6. Also we present and say upon our Oaths, that the custom of the Mines within the Wappentake of Wricks-Barmers to worth is such , that if there be any poor Miner or other poor mens person that hath Oar to be moulten under one Load, if Oar. the Barmers have thereof notice, and will not come to the measure theaeof upon reasonable request and warn= ing to him made and given, then every fuch poor man . may lawfully take two Neighbours, and deliver his Oar to whom he will, so that the Church, the King and Queen have their due lawful Du: ies for the same.

7. Also that no person shall deliver any Oar besides the None to de-King and Queens Measure called The Dish, without lis liver Oar cence Kings Dish. cence of the Barmer or his Deputie, upon pain to forfeit

for every time 2 s.

4 s. allowed Dinners.

No Miners

amerced

Without lawful

8. Also if any Action be commenced in the said Court for 12 mens of Barmote by any person against any man for any Grounds in variance, who soever shall be condemned by Verdict of 12 Men or otherwise, or is a Pannel be summoned, and thereupon do appear, and be sworn to try the Issue, if the Plaintiff will not follow the Suit, or if the Plaintiff for his unjust Suit, or the Defendant for the unjust desence of his unlawful Title, shall be condemned, he shall pay 4 s. for the 12 Mens Dinners, and the Barmer to lay forth the Monie, and he to levie the fame against the partie condemned.

9. Also that no Miner shall be amerced by the Steward of the Court of Barmote without lawful Summons or Warning, upon pain for everie time 4s. and the Burgh-

master to pay amerciamentas.

Summons. 10. Also we lay a pain, that if any person or persons gainst Pur- take away at any time any Stows, Timber, Picke, or any other things concerning the occupation of the Mine from loiners. any mans Ground or Cows, shall forfeit for every time 5 s. whereof 20 d. to the King and Queen, and 3 s. 4 d. to the partie grieved.

Holes and above 3 days.

11. Also we say upon our Oaths, that all Grounds, as Crosses and Holes that be not stowed nor yoked lawfulnot possession ly, from henceforth within 3 weeks and 1 day, that then it may be lawful for any person or persons to take them, and work them lawfully; and no Cross nor Hole shall stand nor prevail any longer time then a Man may go home, and fetch his Tools to work withall, and Timber to stow with; and the furthermost day to be 3 days, and after the third day, then every fuch Cross or Hole shall be lawful for all men to work them to their most profit and advantage.

12. Also we say upon our Oaths, that all Miners within the Wapentake of Wricksworth ought to have by custom Wordanl Witer al lowed by the the freedom there of the next Wood, and Water of the King. Kings Kings and Queens to stow and timber their Grounds under the Earth and above, and therefore the Miners do pay Lot to the King and Queen.

13. Also the Barmer shall able the Miners the next way Barmer to lying to the High-way to the water (if they be stopped) hearest the

upon pain for everie time 12 d.

14. Also we do present, and upon our Oaths we do Miners Frifay, that it is lawful for all the King and Queens Liege vilege pla people to dig, delve, fearch, subvert, and turn up all man-ins ner of Grounds, Lands, Medows, Closures, Pastures, Moors, and Marishes for Oar Mine, within the aid Wappentake of Wirksworth, of whatsoever Inheritance or Possession the same be: but if any Arable Grounds or Medows be digged, delved, or subverted for Oar Mine by any person, not wrought lawfully according to the cufrom of the Mine, that then it may be lawful to the Inheritors or Possessors of all such Arable Grounds and Medows onely so digged and delved, and subverted or mined, the same to fill up again at their own wills and

15. As also we do present and say upon our Oaths, that Wherein a the custom of the said Mine is, that if any Miner be Miner is amerced at the Court of Barmote the first time is (and fo at every Court if such occasion ensue) to double the same untillit shall amount to 5 s. 4 d. whereof 5 s. to

the King and Queen, and 4 d. to the Burghmafter.

16. Also we do present and say upon our Oaths, that Barmote the the custom of the said Mine is such, that no person ought onely Court to be such to sue any Miner for Oar Debt, or for Oar, or for any in. Ground in variance, but onely in the said Court of Barmote; and if any do to the contrarie, they shall lose their Debt, and pay the Charges in Law; and that no Officer shall execute any Writ, Warrant, or Precept upon any Miner being at his Work upon the Mine, nor when the Miners shall come to the great Courts of Barmote, but only the Barmer or his Deputie.

None to keep any Counterfeit Measure.

17. Also that no person or persons shall buy Oar at any times, lawfully or unlawfully meten, but the same to be done openly by the King and Queens Measure called The Dish, upon the Pain for every time so offending and taken therewith to forfeit 10 s. the seller thereof the

18 Wealfolay a Pain, that no person or persons from henceforth shall keep any D sh or Counterfeit Measure in their Houses, Cows, or in any other place; and that everie person shall buy and sell their Oar by the Kings Dish, and none other to be had or used amongst them; and everie buyer so offending and taken therewith for everie time to forfeit 10 s.and the seller to forfeit the Oar by any fuch unlawful Measure so bought or sold.

Keeping

Courss.

19. Also that the Barmaster shall keep two great Courts of Barmote Yearlie, at or about the Feafts of Pasch and S. Michael the Archangel, and everie Week a small Court, as need shall require, upon pain for everie default 4 s. 4 d.

Custom of finding a new Vein.

20. Also our Custom is such, that if any Miner by the grace of God do find any new Rake or Vein, the first Finder ought to have two Measures, and the Barmaster ought to have the next Measure thereunto, for the King and Queen, according to the Custom of the Mine; and everie one after so far as the said Rake will contain.

Barmer in-Stesd of a Coroner.

21. Also if it fortune or happen that any Miner be slain, killed, murthered, or damped upon the Mine within any Grove, neither Escheator, Coroner, nor other Officer ought to meddle thereupon, but the Barmaster or his Deputie.

Nat to measure Ground beforefreed.

22. Also the Barmaster shall not mete or measure any mans Ground, untill such time as there shall be Oar gotten within the same Ground, and that when they free it it shall be meaten.

Not to touch the Diff.

23. Also that the Merchant buyer of the Oar shall not touch the Kings Dish or Measure, nor put his Hand therein to the intent to make his Measure; but the Barma=

ster or his Deputie shall be indifferent betwixt the Mer-

chan; buyer and seller.

24. Also that no Workman shall come to any Work- Avainst man, that doth work his Ground trulie, by any colour stopping the to claim his Ground, or take him up to stop the Field of the Mine, but the first Workman shall work, and the Claimer take the Law, and the Barmer shall do him Law.

25. Also if there be any Gentleman that hath any Grounds in the Mine called The Kings Field of the Mine, Keeping they shall keep them in occupation with Stows and Tim- without ber in all mens fight, or else it shall be lawful for any Stows or man to work them as their own to their most profit and

advantage.

26. Also we lay a Pain, that no person or persons shall No person go to any Gentleman or other man to give or fell any to fell Ground or Groves in variance for Maintainance in Grounds in pawn, for everie man so doing to forfeit the said Grounds

or Groves, and the taker of them to forfeit 10 l.

27. Also if any person or persons from henceforth do Against make any Gage or Counterfeit Measure to mete any Oar any Counwith, if it be above a Load, that then everie such person terfeit or persons so taken shall forfeit 40 s. and if it be a Load or Measure. under a Load, the Barmaster ought to have the

28. Also we lay a Pain according to our custom, that no Against unpersons shall bring any unlawful Weapons to the Mine, Limful meafor everie time 3 s. 4 d. and if any make an Assault or an Affray upon the Mine, everie such person is 10 l. and everie bloud maliciouslie shed against the King and Queens Peace is 100 s.

29. Also we say upon our Oaths, that the custom of Groves or the Mine is such, that if any person or persons will make Meer in any Title in or to any Grounds, Croves, Shafts, or Rakes, variance. Veins or Meers of Groves or Oar, ought to arrest the same according to the old custom of the Mine, and the Defendants ought to be bound in sufficient boud, with fufficient.

sufficient Sureties with him to the Plaintiff or Claimers, not onely to make answer at the next Court of the Barmote to such Actions or Accounts as shall be attempted by the Plaintiff or Claimers upon the faid Arrestment, but also to yield so much Oar, or the value thereof, to the Plaintiff, if the Defendant be cast or condemned by Verdict of 12 Men or otherwise. And furthermore we do Order in the premisses, that after such Arrestment made, the Barmer shall appoint a Court of Barmote within 10 daies, or else as shortlie after as he can convenienlie, and if the Plaintiff do not follow and pursue his Suit upon the said Arrestment, then he to lose to the Barmer 6 s. 8 d. and to lose his Suit also, so the Barmer keep a Court, as is aforesaid; and if the Barmer do not keep a Court, up= on request to him to be made, then is he to forfeit for everie Court not kept 10 s.

Stealing of Oar.

30. Also we do present and say upon our Oaths, that any person or persons do steal or felloniouslie take away any Oar from any Grounds, Groves, Cows, Houses, Boles, or Bolsteds, if it be under the value of 13 d. ob. then the Barmer shall punish such Offenders in the Stocks, Pillorie, or otherwise, as is sit for such Offenders to be punished; and if any Oar be stollen above the value of 13 d. ob. we say it is Fellonie; notwithstanding any surmised, seigned, or imagined Customs amongst us used to the contrarie; and that all such persons receiving, aiding, helping, or comforting such Offenders, knowing them to have committed such Offences or Felonies be Accessorie to the same.

Barmaster or Deputy walking in the Fields any Meer, Grove, Shaft, Vein, Rake, or Grounds according to the custome of the Mine aforesaid, for that we do lay a pain that no person or persons at any time or times, neither by day nor night, shall cast in any of the said Grounds, howsoever they shall be wrought, upon pain for everie offence, ten pounds, for if any grounds be not wrought lawfullie, there is a Law for reformation to be had in such cases provided.

32. Also

Nine to cast in any mans Ground. 32, Also we will that the Lord of the Field or his Deputie, and the Barmaster or his Deputie, shall go once a week once or twice over the Field; and where they find any of these Articles not done, or any that do off ind in any of them, they shall do their diligence to reform the same. And if any of these Pains be broken or forfeited, they shall endeavour themselves and inquire thereof, and present the Offenders and Offences at the Great Court of Barmote from time to time.

32. Also we do lay a Pain, that no person or persons Against Cashall from he ceforth Cave in any mans Grounds or elsewhere, upon pain to forfeit the Oar to them that will take the same from the Cavers, and they to forfeit for everic Offence to the King 6 d.

### FINIS.

AN ABSTRACT OF THE CIVIL LAWS
Concerning Metallists, Metallick Artists, Alchemists,
Metalls, and Monie.

## De METALLARIIS.

Metallarius quilibet effe potest.

Me a larii possunt esse Laici & Reli iosi.

M tallarii pro in roi u deben' stere Fisco tertiam partem unciæ pro fossone lib um annuam; 14 uncia um pro purificacione, dus decimas Fisco si fodit in publico, unam si in privato.

Sed de au o solvere tantum debent 7 scrupulos annuos.

Fravalett men consultudo.

Si d Jerurum artem poss nt compelli ad illam reassumendam, quananque Prascriptione non obstante.

Ita possunt retrabi a l'officium filii Metallariorum.

Etiamie freeint in Jervitio Principis.

Quilibet in proprio fundo metalla potest inquirere, dun modo

Fisco partem debitam selvat.

In fundo usufructurrio similiter inquirere po'est, nist partem fundiledat, vel formam mutet, vel acrem corrumpat, vel Jumptum magnum proprieta io affe. at.

Ita poterit in fundo Emphyteotico.

Et in fundo Feudali.

Et in Dotali.

In fundo Communi potest inquiri invito Socio, si prædium sit ad boc destinatum, vel aliqua pars, & socio d'mnum non

inferatur. Socius potest incidere sylvam cæduam, invito socio, ne pertinacia

anius altero noceat.

Ad Met lla inquirenda vel effedienda societas coiri potest.

In solo publico Metalla inquiri possant.

Et in selo alieno volente domino.

Et invito domino ob publicam utilitatem.

Dummodo non infera ur prajadicium domino.

In ipiens inquivere vel fodere in suo, si vena transit in alienum, pitest eam prosequi domino invito, dummodo fiat sine ipsius detrimento.

Vel no et ipse dominus initio inquirere & fodere.

Nisi extraneus jam repererit, vel expensas in fodiendo se= cerit.

## DE ARTIFICIBUS METALLORUM.

-Artifex alicujus artis di itur, qui ejus artis babet scientiam Ementes, & Vendentes, & Negotialores, non veniunt sub nomine Artificum.

Ad probandam peritiam Artificis opus est testibus in arte pe-

Artifices puniuntur, si nonjuste & sine fraude arles suas ex-

Aurifex faciens aurun minoris Ligæ punitur pæna falfi. Aurifex vendens rem vitiofam scienter, tenetnr ad totuminteresse; si ignorans, tenetur ad quanto minoris empturus su-Arz Met

Artifices sant immunes à publicis muneribus personalibus.

Artifice ad hoc, ut gaudeat imunitate, Matricula quinque requisite habere debet.

Descriptus in Matricula.

Peritus inilla arte:

Exercens illam artem.

Per se, non per alios.

Benam partem fortunarum suarum in illa arte positam.

Dis ipuli non gaudent privilegiis artificum, sed in testamentis

Art f x deferens artem per decennium desinit e Be Artifex.

Art fex confuctus obedire alicui Magistratui, non liberatur nisi desuetuaine legitima in contravium.

Artifix qui deseruit artem potest conveniri ante superiorem, ar-

Hares artificis coram Judice defuncti, provebus artis est con-

Duas arces exercens ambarum privilegiis gaudet.

### DE ALCHEMISTIS.

Species una Metalli in aliam mutari potest.

Aurum vel Argentum A chemicum habet verum & proprium Auri vel Argenti substantiam, sophisticatum habet colorem, & apparentiam tantum.

Alchemicum verum à naturali non differt.

Alchemicum pro naturali solvi potest, sophisticatum non po-

Re i totum sophistico Eta vendita, non valet venditio.

In pariem sophisticata valet, in ca parte in qua non est erras

Error in materia vel qualitate substantiali non vitiat actum, sed in qualibet invisibili vitiatan.

Indistractu & liberatione error vitiat actum, ut anea solutio pro debito aureo.

In deposito non vitiat.

Neque in pignore.

Emens

Emens as pro auro, ignorans, halet actionem adversus evenditorem, sciens non habet

Si ignare venditum, & datur a Elio ex empto; si scienter a Elio ex empto; si scienter a Elio

Alchemista si vendit sof h'sticatum pro vero, non poiest esse testis; si prosphisticato, potest.

## DE METALLISE

Aurum, vel Argentum, vel alind quodeunque à flumine prædio meo adjesium & terra coharens, menm fit.

Quod procedit si dominus ignoretur.

Vena Metallorum ignota funt in dominio domini fundi.

Venæ quæ sunt in fund. Fisci vel Principis, ad F. seum vel Pr ncipem spoctant.

Que f nt in fundo Universitat's, Sunt ipsius Universitatis.

Qua in fu do Ecclesia sunt Ecclesia.

Ou sant infunde privatorum, ad privatos pertinent, non ad Fiscum.

Que in fundo Emplyteotico ad Emplyteotam non ad dominum

direstum.

Que in fundo Feudali ad Feudatorium

Que in fund ufufrudu mii ad ufufructuarium.

Que infundo Dot li firenascantur, u aurifodina funt Mariti,

si non renascantu, ut lepides, sunt uxoris.

Expensas in sun do Dotali factas à Marito pro inveniendis sodinis, si sunt ad perpetuam utilitatem rei maritus rep tere potest; si sunt ad fuctus quaren los vel colli endos, non repetit sed con pensontur cam fructibus.

Si mulier impediat marite foainarum usum, & impensa facta sit gratia fructuum, da ur marito actio ad exhibendum, si gra-

tiarei, datur actio de Do e contra ia.

Metalla qui invenit in fundo alieno, decimam unam delet domino fundi, aliam Fisco vel Principi, reliqua sibi acquirit.

Incipiens fodere in suo sundo, & per cuniculos transit in alienum, & ibi Metallum invenit, sibi venam acquirit, non domino sundi. Etratineus cuviculum apertum, acquirit jus in tota vena, licet fodiat in una parte tantum.

Dominus fundi scuns & patiens aliquem fodere in sua vena

Spatio 30 annorum, amittit jus suum.

Commoditas vel jus fodiendi servitus est personalis, non realis.

Dominus ven.e prasumitur is qui repertus est possessor bostii cuniculi.

In dubio possessionis Judex debet summarie se informare, & possessionem manu tenere.

Fundo vendito vena fundiomnes censentur vendita.

Venis in venditione exceptis, extantes eo tempore, intelliguntur non post a in venta.

Nondum in venta in venditione reservari possunt.

Vena inventain fundo diviso, spectat ad eum cui fundus obtigit in divisione.

C. strum si Princ ps concedat cum fodinis suas fodinas concedit non privatorum.

Pup llus fodinas alienare nequit.

### DE MONETA.

Monetam cudere solus de jure potest Imperator.

Vel is qui abipso Licentiam habet.

Expensis Debitoris & Creditoris talis assimator solvi debet.

Aure pretium angeri vel menui potest à Principe vel Authorita-

tem cudendi habente.

Pro valore currenti quilibet accipene tenetur.

Duabus mo setis in Civitate currentibus, debitor eligere potest ad solvendum quam volet, nisi aliter pactum sit.

Pro del ito au i vel argenti, in massa, non potest solvi pecunia,

nisi sit ejusdem probitatis, ponderis & liga.

Debitum expresse quantitatis & monetæ veluci librarum 100 in Fl rens, debet silve in quantitate 100 librarum, licet Florenus sit valoris varii.

Moneta in Testamento velista juxta valorem testamenti solvi

debet.

Contra Campsorem age: Creditor, si ex e jus approbatione damnum habet. Gg Tradition onct à aures pro argentea vel elia est centre Elus nominalus.

Moneta non est vendibilis neque locabilis, sed mutuabilis.

Falsa est monet a vel mistione materia, vel de socilu nominis Principis, vel ex desectu anthoritatis in eo qui ondit.

Falfans Monet am Imperatoris incarrit in erimen Lafa Majesta-

tis, sed minoris Princip's al errus non incurrit.

Falfans monetam auream imperatoris cum ejus imagine comburendus est, & ejus bons co fise arda.

Non aure im, vel non cum imagine Imperatoris capite plettendus

Tondens non cudens ultimo supplicio diminandus.

Si tonsa remaneat in suojusto valore, non punitar.

Expendens falfam stannei vel plumbi incidit in jænam falsi, aris vero vel argenti in leviorem pænim.

Er pænant evadet, si doceat unde habuerit.

Vel Ji habens sit bona conditionis & fame,

Vel si paucam monetam babeat.

Fundens monetam committii pœnam falsi.

Falsins monetam reprobatam non incidit in pænam falsi.

Fabricans monetam sine licentia superioris, licet non falsam, committit pænam falsi.

He & alie reperiuntur Leges & amplificantur in Codicibus Juris Civilis, viz. Digest 1.3. tit. 4 leg. & lib. 48. tit. 19. leg. 8 sest. 4,5,6,7,8. & Cod. 1.11 tit. 6 leg. 1,2,3,4.5,6,7. & Institution of Leg. 39. & diversis Authoribus diligentissime scrutaris per Joannem Guidium Volateranum.

e de la companya de l

Menor in I proposed sections and em externers place

Course Carpo out a go Go office for approl ..... The

## An Abstract of Sir JOHN DAVIES Report of

## Mixed Monies.

Queen Elizabeib for Paiment of Her Armie Royal for the suppression of the Rebellion of Tyrons, coined in the Tower of London a great quantitie of Mixed Monies, with the utual Stamp and Arms of the Crown, and Inscription of the Royal Style, and fends it over into Ireland with Proclamation dated 24 May, 43 of Her Reign, where. by She declared the laid Mixed Monie immediately after the Proclamation made to be Lawful and Currant Monie of the Realm of Ireland, and commands that the said Monies shall be so accepted, reputed, and used by all Her. Subjects, and others having any Traffick within the said Realm; and if any person shall refuse to receive the fame according to the Denomination and Valuation, roiz. Shillings for Shillnigs, &c. they shall be punished as Contemners of Her Royal Prerogative and Commandment. And to the intent the faid Mixed Monies might p is more freely, it was also declared by the said Proclamation, that after the soth. day of June next all other former Currant Monies should be decried and annulled, and steem d as Bullion and not Currant Monie.

In April before the Proclamation on Brett of Drogheda a Merchant having bought certain Wares of one Gilbert of London, became bound to the said Gilbert in 200 l. Conditioned for the paiment of 100 l Currant and Lawful Monie of England at a certain day to come, and at a certain place in Ireland, which day happened to be after the said Proclamation. At the day and place Brett tenders the 100 l in the Mixed Monie: Whether this Tender was sofficient to save the Forseiture, and whether the said Brett should be compelled to pay the said 100 l in the other or better Monie, was the Question at the Council

Table upon the Petition of Brett.

And

And because this was a General Case, and of great importance, Sir George Carye (being then Lord Deputie) required the Chief Judges to consider of the Case, and to return their Lesolution; who upon consideration resolved the Tender of the said 100 l. in Mixed Monies was good to save the Forseiture, and that Brett should not be inforced after to pay any other Monie in discharge of the Debt, but according to the rate and value at the time of the Tender. And this their Resolution was certified to the Lord Deputie, and entered in the Council Book, wherein divers Points were resolved

1. That in everie Kingdom or Commonwealth there

ought to be a certain Standard for Monie.

2. That the King of England is to coin the Monie in His Dominions, and none other without his License; and if any shall presume to Coin, 'tis Treason against the

King Parson by the Common Law.

of what matter and form he please, and establish the Standard thereof; and may change His Monie in Substance and Impression, and enhaunse or abase the Value, or die y and annul it, and make it Bullion at His Pleasure.

4 That the Mixed Monie having the Impression and Inscription of the Queen, and being proclaimed Currant within the Kingdom of Ireland, ought to be accepted

for Sterling Monie.

5. That although this Mixed Monie was made to be Currant within the Realm of Ireland onely, yet it may be

called Currant and Lawful Monie of England.

6. That although at the time of the Contract and Obligation pure Monie of Gold and Silver was Currant, yet the Mixed Monie being established before the Day of Paiment, the Tender is good, and the Obligee is bound to accept thereof, or is without remedie of any other Paiment.

## An EXPLANATION of several Words used in this History, as an Essay to the larger Dictionary of Metallick and Chymical Words, mentioned in the Preface.

A.

Adulterate, adulterating.

Adulteration, metaphorically used for the undue Mixtures of any thing which is prohibited by Law.

Agriculture, tilling, dreffing, or manuring Earth, whereby it may be better adorned with varieties.

Alchimist, Alchimy. See Chemistry.

Alien, a stranger or foreiner, to alien, alienate, or fell to another, or stranger, from Alienus.

Amber, Metallick or Electrum, compounded of Gold and Silver, vide Preface.

Architecture, or the Art of building houses, &c.

Arts Mechanical, vide p.30,31.

Aspect, beholding or viewing, Aspect of Stars, is when certain Planets and Signs in Heaven do behold each other; and there are four such Aspects.

1. Trine. 2. Quartile. 3. Sextile. 4. Opposite Aspect, viz. in Books of Astronomy.

Barmote, vide Barr-master.

Barr-Master or Barmer, and Burgh-Master, Barrmoote and Burghmoote; Moote here signifies a Court where the Matters in Controversie are decided, and as Hallimoote is called from Guild-Hall, where fuch Mootes are kept, and Burgh-Moote from such Burgs, Boroughs or Towns where Courts are kept, so Barrmoote is only used for Miners, where they appear at a Barre, and he that gives the fentence as Superior is called the Barrmaster or Barmer, or Ruler of that Barrmoote or Court for the Miners.

Barrmine, such Mine as is adjudged at their Barmoote.

Bell-metall, how made. p.4.

Bellows, fuch as blow the fire for melting Metals.

Blocks, what, see p. 4. we give pieces of wood the same name, and they have an Analogie in respect of weight.

Boles or Bolestids, are places, where in ancient time, (before Smelting-Mills were invented) the Miners did fine their lead.

Bone-ashes, or bones burnt, and then beaten small, of which Tests are made, vile Tests.

Botannists, such as deal in Plants.

Brass, how made, see p. 4. The Latin word is £s, which is usually applied to Copper, but improperly; for Cuprum is Copper as a simple Metall, and £s brass, a compound Metal of Copper and Lapis Calaminaris, and this word Brass having no affinity with the Latin words Cuprum or £s; it is probable that Composition was known before the Romans time, and so never altered its name, and so of

Gold and Silver. See Copper.

Boule, or difh, which is a certain measure, wherewith the Miner use to measure out the duties to the Church and King, reserved from the Oar as Tythe, containing about half a peck.

Bullion, what fee pag. 40.
Burghmaster, see Barmaster.

Cakes, what, see p.4. call'd so in relation to their form round and flat, in part convex.

Calefaction, calefying, or making

Cards, which are certain pieces of board, whereon wire is fixt, fo as

## THE TABLE.

to kemb out wooll, and fit it for making of woollen clothes. And are fure Cards, Cards of labour and profit, not of pleasure and idleness. See " ire.

Carriers. See p.39.

Cast-works: fuch Metals as are not Malleable, or apr to be beaten, by reason of their fragile or brittle nature, and are therefore cast into Plates or formes fit to be cut into Wire, or other uses.

Cephalicks, Cures of Diseases belonging to the head. p.5.

Chymistry, Chymick, Chymical, or Chemistry. The Art of separating Metals. See Alchimy.

Cinders, the scum or refuse of Iron which is burnt.

Circuit, Circuity, a compassing, or going about.

Coale, 1. Black, fuch as is burnt or charkt. 2. White, which is only baked in an Oven to make it dry for fewell.

Culestial, things belonging to Heaven, from Cælum.

Condenfation, or being more hard or

Conflagration, when all things shall consume together, as at the last day of Judgement.

Cope, from Copia plenty. See p. 89. Copper, confifts most of fulphur, this is like to come from the Latin word Cuprum, and taught us by the Romans. See Brass.

Cordials, things which comfort the

Cowes, are houses that the Miners build over their Groves, and not fuch as give milk; I suppose rather Coves Cover ngs.

Coyn, to coyne, coynage.p.40.42.56.

Dyalling of Mines, what, see p. 2. which is done with the like Inftruments of Art, by which Sun-dials or furveighing of ground is performed, p.2. See G. Agricola.

Discoverer, is any person who doth finde out a Metal or Mineral which was covered, and discovers or reveals it to the Proprietor of the ground, or to the Societies, &c.

Domestick or that which concerns business at home.

Effluxion, which flows from a thing as sweat from the body.

Elixer. See Quintiffenc .

Ens veneris. p.5. Epilepticks (from Epilepfie) Cures for the falling fickness.

Eucharist, or the Sacrament of the Body and Blood of Christ. See Transubstantiation.

Emers, vide Ores. Excression, that which grows naturally, or by force of Art, out of any thing.

Exhaustion, to exhaust, exhausting or drawing out.

Extraction, or drawing by force, also to extract, Extractings.

Extrinsick, or outward.

Fuell, or Materials wherewith to supply or continue fires, whether wood or any other combustibles.

Genuine, or natural, from Genus, its proper kinde.

Gold, the most perfect of all Metals, it comes not from Aurum the Latin word, which shews the Romans had little use of it here, or it had a name with us before their Lan-

Grove is the Pit that leads down to H.

the Mine.

Hypocondriacks, diseases relating to the fpleen. Hyfterick Paffions, fuch as the Difeafes called the Mother, Convulsi-

ons, &c.

Incorporation, Corporation, Incorporating, are embodying feveral men into a joynt Company, or Society, for the carrying on some Affair, and the person so incorporated called a Corporators, or Incorporators.

Ingotts .

## THE TABLE.

Ingotts, or filver melted into proporportions, fit to be cut into coyn. See p. 40.

Intrinsick, or inward.

Iron, feems to be a word which is more ancient then the Roman Language, which terms it ferrum, unless ferrum be called Iron by way of Irony

Lattin, is brafs coloured over with oare, it is only cast, and is too brittle to endure the hammer: How the word hath relation to the Roman Language is to be enqui-

Lead feems to be a word also with us more ancient then the Roman Language, which calls it Plum-

Leffees, fuch as take Leafes from others, or of any Mines from the Societies, with Covenants to work the same, and pay the Kings du-

ties,&c.

Letters Pattents, Litera Patentes, or Writing, fealed with the broad Seal , of England, whereby men are authorifed to do or enjoy any thing, that otherwise of themselves they could not do; there are four forts mentioned in this History: First, of the Mines Royal, p. 49 54. 62. Secondly, of the Society of the Mineral and Battry-works, p. 57. 60,65. Thirdly, of the Society of the Royal Company, p. 27. And fourthly, of the Royal Company,

Ligament, a mineral word from Liga, where the Composition of Metals binde together more firm.

Liquidity, Liquidities, liquid or moistning.

Manufactures, such useful Arts as are performed by the labour or action of the hand.

Meditullian, that part of the Earth which is between the Center and the Surface of the Earth.

Meere, 20 yards is a Meer in the low Peak, 31 in the high Peak, and the bredth is from skirt to skirt, in a rake or Pipe-work, and in a flat work.

fuch as deal in Me-Metallifts,

tàls.

Metals of seven sorts, vide Preface. and p. 3. 6, 7. the distinction of which are referred to the intended Dictionary of Metallicks, or pertaining to Metals.

Metals Artificial.

p.43.

Mines, what, vide p. I.

Mine Royal, and poor-Mine, vide p 9.

Minerals, the several forts, see p. 5.6. 7. the definitions of which are referred to the intended Dictionary.

Mineralist, such as deal in Minerais.

Mint, See p. 40. Mony, see p. 42, 43.

Multiplication of Coyn, fee p. 43.

Needle, a piece of Iron fixt on a Center with which Marriners, Surveyors, and Diallers use to shew the North and South-points: The word is also used for an instrument wherewith men and women few garments.

Ores, what, and the forts of them? vide p.2,3: the word is also used for oars which Watermen use, only differs in Orthography Glanceore, white-ore, which fometimes are called Ewres, fee p.49.

Oftiology, or a discourse of the nature

of bones.

Pale of Ireland, see p8. Parliament or Parlement. ib.

Patents, vide Letters Pattents.

Petrefying, petrefaction, or turning foft or liquid substances into more hard or stonie, from Petra aRock.

Pemter, vide p. 4.

Philosophers stone, see Quintessence. Piggs of Lead, see p.4. some call them Sows, with some Analogy to Ani -

H 2 mals

## THE TABLE.

their production.

Pitts, what see p 1. somtimes taken for places which hold water, which are digged with Spitts or Spades.

Pores, are certain visible or invisible holes in the bodies of all fublunary Creatures through which they fend out a certain breath or Liquid matter.

Practical or Practick learning, or the Theory, or Theorems of Arts which may be put in practice, vid.

Theory.

Pra Empsion, a power given for one to buy any thing before an other.

Prarogative, is that especial power, preheminence or priviledge which the King hath in any kind over and above others, and above the ordinary course of the common law, in right of his Crown, wherein he is only subject to God

Proprietor, he who hath the property or right of the foil, wherein a Mine

lies hid, or discovered.

Quarry, what, vid. p. I.

Quick-Silver, feems to be a word used by us more ancient then the Roman language, which calls it Argentum Vivum, or Living Silver, which we call quick by reason of its nimble and active power, and therefore by some called Mercury.

See S.lver.

Quintescence, El xir, or the Philosophers Stone, is a 5th spirit that doth tie the spirits of the four Elements together, and as the four, Elements are in some proportions in all bodies, fo is this spirit, and it is the Art of the Philosopher to extract this spirit out of any body, and that 5th. Spirit which they extract out of Mettalls is this Quintescence, or five spirits, by which fuch Miracles are to be effected, vid. p 4+, 45. See Elixir. R.

Rake, is a vein of Oar that lieth between two Wongh, that is not covered with a lid stone, and not a

Rake made with teeth.

mals of that name, in relation to | Reaffume, Reaffuming, Resumption not a taking a thing back again, which was formerly given or graunted.

Refiner or to refine, is he that melts Mettal again, to bring it into a

more pure substance.

Resplendency, Resplendant, Splendid or splendour, is that which affoards great brightness, so that Resplendency is to be understood double that brightness, and so in other words, where the addition of Re, guides the word.

Sle'ges, fuch wherewith in many places they draw weights, where Carts, Tumbrells, &c. are not used.

Sciences, the 7 Liberal. vid. p 30. ard

Shade, or glittering Earth, being as it were the shadow of a greater light.

Shafes, what, fee p 2.

Silver, begotten of Quickfilver and Sulphur, it comes not from Argentum, the Lattin word, which thews it was not in use before the Romans, or at least had that name before them. See Quick filver. Sluggs, is the drofs remaining after

melting or refining Lead, &c.

Smelt, or Melt, thence a Smelter or Melter.

Specimen, a proof or example.

Speculation, speculating or beholding any thing as in a glass face to face, and fomtimes a meer vision of the

Sophisticate, to imitate the wisdome of Naure, by some false or counter-

feit Art.

Spadiardo, fuch as dig with Spades

Stannaries, from Stannum Tin, See

Standard, Money according to the Standard, is that which the State doth allow to be the mixture, as if 10 parts of Silver and 2 of Copper to 12 d.or more or less as the State please to decree: The word is also used in martial affairs, as the Kings Standard, which carries his Co-

## T HE TABLE.

lours, as money doth, his Super-fcription.

Stampers, fuch as beat the Oar small and fit for the Washers.

Steel, natural and artificial, See p. 4. and hath no affinity with the Latin

word chalybs.

Stow, to stow is to set pieces of wood upon the Grove or Pit, or the place where the Miners do intend to make a Pit, so as to lay a turntree and rope, whereby to draw Earth or Myne out of the Grove.

Subterranean, that which is in and under the Earth, and under the fur-

face thereof.

Superficies or Surface, that which appears first to the eye of a thing

represented unto it.

Swords, whereby is here to be underflood somewhat belonging to the Be lows, and not weapons offenfive or defensive, or rather Soards from Soare, or the arising and depression which cause their sufflation of the fire, and so melts the Oare,

Synonima, or of like name.

#### T.

Terrestrial, or things belonging to the Earth, and Terrene.

Tests, are made of bone-ashes mixt with water, of several proportions great or small, wherein Metal is essayed in small parts, or melted and refined at large,

Theory is the confideration of what may be put into practice, vide Pra-

crice.

Tin, Tinners, Stannaries, vide p. 12.

& 79.

Touch, from Touchstone, upon which if Gold or Silver be rub'd, the true is more easily distinguished from the salse.

Transubstantiate, or Transubstantiation, or Transubstantiating, is to alter the substance of a thing, or transfer it from one substance to another, as making Gold of Silver, &c. See p. 44. and Eucharist.

Tun is 20 hundred weight, or four Hogsheads, or 12 score and 12

Gallons.

### V.

Veins of Metal, see p.2. Virgula Divina, see the Preface. Vocabulary, a recital of words.

Otenfils, properly used for things of use, belonging to house-keeping, but generally used for the tools belonging to any trade.

### W.

wash, the Metallists usually, when their oar is stampt small, do put it it into a sieve, and poure water on it, which washes the durt from the Oar.

Winlace, or an Engine to winde up weights, or any thing elfe with-

a

wier, there is a Prohibition of forein wire in the fourth of Edw. the fourth, and in the 29. of Eliz. and other Statutes; but I finde not in any of our Dictionaries, English or Latin, the word wire, but in the Italian, (who use no W.S. it is virare, to veer, or vertere, to turn, or draw any thing round. and so is Wire, and the French call the drawing of Wire, Tirare, T and V, being the fame in their dialect for that Vier or Wire intends the same thing, and Walton in all his Tranflations of the 7 Oriental Tongus, calls Wire only filum, and fun. co-Tremel, filamentum, or Metal drawn out like a Thred, from whence we call small wire. thread of Wyer. The reason of prohibiting forein wier, is because it is so weak and flexible, that it doth not kemb Ii

## THE TABLE

the wool as it ought to be, whereas English wire is strong and more sit for that purpose, and these wiers are framed with pieces of stat boards, which are called Cards. See Cards.

eroughs, or Wall of the Groves,

Toaked, is to fet pieces of Wood joyned together within the Grove, to prevent the Earth falling.

is Green, Pir, or electer where the control of the

the grant first will get an in 17

COR

turn, or draw any this record and folials and folials as and healt meeted the drawing of Vire Flore and thing for or withing and the me in heir allegions of the folial with and are all when and thread of Vijer for it when of prohibiting forein when its hermal its hermal it is to well and flexible, that it doth but the

the first of the state of the first of the state of the s

The strong Touch inner upon which or Silver, he rebid, the I as is more early delanguished to a changeished.

etrasi deldri Tim enajandelde T

## CORRIGENDA.

PAg. 5. line 28 read Cephalicks, p. 7-1. 36.r. Mines lie, are. p. 28.1.17. r. Tinn. p. 32.1.22
r. Receive supplies p. 33.1.25.r. Abertivy in Wales, p. 37. 1. 21. r. At the Red. p. 38.1.42
r. great Treve. p. 42.1.19.r. As For sucry. p. 60.1.30. r. Jepson Knight. p. 73. 1.19.r. given shem. p. 79.1.26. r. Melting. p. 86.1.8. r. be not. 1. 15. dele but. p. 87.1.4, r. carry from. p. 86.1.6, 1.0, 1.4, r. 60pc. p. 99.1.30.r. Is to pay. p. 80.1.7, r. Cuniculi. p. 108.1.5.r. Resolution. 1, 19. Person.

FINIS.

# CORRIGENDA.

App. Since Spread colored with policin store stores from the terms possible for the policy of the store of th

FINIS.

